Global Entrepreneurship Monitor

Sunil Shukla | Mohammad Ismail Parray | Navniit Siingh Chatwal | Pankaj Bharti | Amit Kumar Dwivedi

India Report
2015/2016

Global Entrepreneurship Monitor 2015-16

India Report

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Entrepreneurship Development Institute of India (EDII), Ahmedabad

Centre for Entrepreneurship Development Madhya (CEDMAP), Bhopal

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EXECUTIVE SUMMARY

In 2015, *Global Entrepreneurship Monitor (GEM)* study completes 17 years of the journey to create knowledge on entrepreneurship around the world. The study has a noble mission to generate globally comparative data to understand the entrepreneurial activity. This would help identify factors determining national levels of entrepreneurial activity, as well as policies aimed at enhancing entrepreneurial activity. It measures entrepreneurship through surveys and interviews of field experts conducted by the teams in the respective countries. The GEM survey generates a variety of relevant primary information on different aspects of entrepreneurship and provides harmonised measures about individuals' attributes and their activities in different phases of venturing (from nascent to start-up, established business, and discontinuation). This 2015 GEM report covers results based on 60 economies completing the Adult Population Survey (APS) and 62 economies completing the National Expert Survey (NES). The present report provides insights into entrepreneurial activities in India. The GEM India study was conducted using a well-established GEM research methodology that is consistent across all participating countries, thus enabling cross-country comparison. The APS was conducted among 3,413 samples and provides information regarding the level of entrepreneurial activity in the country based on the national framework conditions, whereas the NES was conducted on 72 national experts with an average age of 41 years. The NES focuses on entrepreneurial start-up environment in India with regard to nine entrepreneurial framework conditions (EFCs).

Major Findings of GEM India Survey 2015 in a Vignette

APS (2015)

- In India, 39% of adults consider entrepreneurship as a desirable career choice and around 47% think that entrepreneurs receive a high level of status and respect. However, entrepreneurship in India is a less desirable career choice when compared to its peers in the factor-driven (least developed) economies as well as the BRICS nations, except Russia as the data for Russia is not available.

- Among the four Indian states, Gujarat and Chhattisgarh ranked high in entrepreneurship as a preferred career choice (64% and 42% respectively) in comparison to Madhya Pradesh and Jammu and Kashmir (23% and 27%).

- As compared with females, the male adults have a considerably higher positive attitude towards entrepreneurship in society. The Western, Southern, and Northern regions of India have a more positive attitude towards entrepreneurship in general when compared with the Eastern region.

- In India, 38% adults perceive good opportunities to start a business and 38% adults believe they have capabilities to start a business, while 44% feel that the fear of failure is preventing them from taking the plunge.

- Comparing the perceptions among male and female respondents, fear of failure, which prevents individuals from starting a business, the margin is declining (45% for males and 43% for females) in comparison to last year. However, female respondents continued to have lower scores on perceived capabilities (28%) and perceived opportunities (31%) than their male counterparts.

- GEM 2015 survey found that in India, 3.2% adults are “nascent entrepreneurs” (actively involved in setting up a business), while 7.7% are “new business owners” (in operation for more than three months but less than 42 months). Combining both the rates gives us the Total Early-Stage Entrepreneurial Activity rate, meaning that 11% of the Indian adult population is engaged in some form of early-stage entrepreneurial activity.

- The report found that in India about one-third of the early-stage entrepreneurs are women. The data presented in the report tells that the female participation in early-stage entrepreneurial activity is 8% which is lower than the males (14%).

- The GEM India Report 2015 found that Northern region has highest contribution in entrepreneurial activity, whereas Eastern India has the lowest among all four regions.

- The rate of business discontinuance is anticipated to be the highest in factor-driven economies. However, India’s entrepreneurial exit rate is the second lowest among all GEM countries, which is indeed a positive factor. However, the major reasons indicated for entrepreneurial exits accounted However, of the major reasons indicated for entrepreneurial exits, unprofitable venture (47%), personal reasons (22%), and lack of financial support (13%) topped the list.

- In India, entrepreneurs motivated by necessity (no other option for work) account for 19% of early-stage activity, while 79% are motivated by opportunity-driven motive and 34% are motivated by improvement-driven motive.

- The report found that 60% of total early-stage entrepreneurs have a low growth orientation and do not intend to increase employment prospects, while 37% are part of slow growth companies looking at hiring one to five employees. The data confirm that only 4% entrepreneurs expect to grow rapidly in terms of employment creation (more than six employees).

NES (2015)

- The opinion of national experts revealed insights on factors impacting the environment for entrepreneurship. These factors are known as EFCs of the country.

- According to the GEM National Experts Survey 2015, the major constraints for entrepreneurship development in India include lack of funds, government regulation and complex tax structures, entrepreneurial education at primary and secondary school levels, and culture and social norms.

- The major enabling factors include government regulation and policy reforms, physical and commercial infrastructure,

internal market dynamics, and entrepreneurship education and training.

- Recommendations are suggested to facilitate government policies surrounding regulatory entry and barriers to growth, availability of liquidity and capital, labour market, R&D, commercialization and knowledge spillover, taxation, intellectual property rights, and bankruptcy. There is also a need for further capacity building through education and training, restructuring of incentive and tax structures to promote more opportunity-driven entrepreneurship.

ACKNOWLEDGEMENTS

The GEM India Report 2015-16 is an outcome of the collective efforts of GEM India consortium, which has been created by three institutions, Entrepreneurship Development Institute India (EDII), Ahmedabad; Centre for Entrepreneurship Development Madhya Pradesh (CEDMAP), Bhopal; and Jammu & Kashmir Entrepreneurship Development Institute (JKEDI). This report is the third national level report by the GEM India Team in a row. The report provides information on entrepreneurship ecosystem prevailing in the country and entrepreneurial activities being carried out in various states. We also wish to express our gratitude to all the GEM India Team Members for their support and contribution to this project.

- First of all, we are thankful to the Heads of all the three institutions - EDII, CEDMAP and JKEDI for their constant guidance and support. Their confidence in the team members has motivated the team members in bringing out such a prestigious report.

- We owe our gratitude to the GEM Global Team at London Business School, Babson College as well as the GEM Data Team for their unceasing aid and assistance at all times.

- We thank Mr Arif Khan from JKEDI for coordinating Adult Population Survey.

- We appreciate the support extended by EDII's doctoral students, Mr Subhendu Kumar Mishra, Mr Kumar Aashish, Mr Raj Shankar, Mr Sumit Kumar, Mr Analjyoti Basu and Mr Saurabh Kumar

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- We also thank Mr Nikhilesh Desai for facilitating the publication of this report and acknowledge the editorial support provided by Ms Julie Shah and Ms Vandana Yadav at BDC-EDII.

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CHAPTER 1

INDIAN BUSINESS PERSPECTIVE AND ENTREPRENEURSHIP

1.1 The Indian Economy

The state of Indian economy has witnessed rapid progress over the past decade. India's Gross Domestic Product (GDP) is about $2 trillion and it ranks seventh among the largest economies in the world. During the year 2016, the Indian economy has been growing at a rate of 7.6 per cent and according to reports of International Monetary Fund (IMF), it will continue to retain its position as one of the fastest growing economies in the world till 2020. India's growth has continuously benefitted from large improvements in terms of trade, positive policy actions such as implementation of key structural reforms, gradual reduction of supply-side constraints and a rebound in confidence. Consumption growth has remained strong and activity in core industrial sectors has picked up.

India has done significantly well in context of other macroeconomic indicators as well. Its fiscal deficit is reducing. In the financial year 2015-16, India's fiscal deficit stood at 3.9 percent. Significant measures were taken to contain the same including having a check on public expenditures, revising and deregulating prices for petroleum products and an overhaul of the subsidy regime. Inflation, one of the major concerns, has been moderated significantly too. The Reserve Bank of India (RBI) has indicated that inflation is likely to be below 6 percent in 2016. Sharp decline in global commodity prices, especially crude oil, tight monetary and fiscal policies and supply-side measures, including lower increases in Minimum Support Price for major food grains, have helped in containing inflation. The Current Account Deficit (CAD) has also narrowed and as per RBI's estimates for the fiscal 2015-16, CAD is estimated to be around 1.5 percent, which amounts to USD 300 million, lowest in the past seven years. This improvement in the current account has been underpinned by a sharp decline in gold imports as well as oil prices.

Reflecting upon improved domestic macroeconomic situation and consistent accommodative global monetary conditions, India has received large portfolio flows in the recent period, much higher than CAD. This has enabled the RBI to build up its foreign exchange reserve, which is now estimated at USD 328 billion. Financial institutions have responded well to this influx and banks in India remain well capitalised with the Capital-to-Risk Assets Ratio (CRAR) at 12.8 percent. The Capital Adequacy Ratio (CAR) of public sector banks is also comfortably placed at around 12 percent and is well above the regulatory requirement. With a thrust on financial inclusion, 120 million new accounts were opened under the Jan-Dhan Yojana scheme. To promote competition, two new private banks were issued licenses in the year 2014. A framework has also been put in place to license differentiated banks (payment banks and small finance banks) for serving niche interests. RBI has granted licenses to 10 small finance banks and 11 payment banks in 2015.[1]

India represents a coalesce of rural and urban population with a significant rise of the affluent middle class. According to Ernst & Young, India's middle class, already about 50-million strong, or five percent of the total population, will reach 200 million by 2020. They further predict that growth of India's middle class will accelerate quickly, reaching 475 million by 2030.[2]

India is also projected to be the youngest nation in the world by the year 2020, where 40 percent of the population is under the age of 35 and a million people turning 18 every month. As the population grows, it will significantly reshape India and the world politically, economically and environmentally.

India is consistent in its growth rate but its GDP per capita is the lowest among the BRICS countries.

Table-1.1: GDP per capita at constant prices of BRICS nations (in USD)

List of Nations	2014	2015	2016	2017*
Brazil	11,920.280	8,669.653	8,586.547	9,408.513
Russia	14,160.085	9,243.305	8,838.228	10,060.370
India	1,600.852	1,603.614	1,718.687	1,852.187
China	7,718.586	8,140.981	8,260.878	8,928.666
South Africa	6,503.460	5,726.875	5,018.216	5,074.109

Source: World Economic Outlook database October 2016, published by IMF

[1] RBI Bulletin 2016/2015

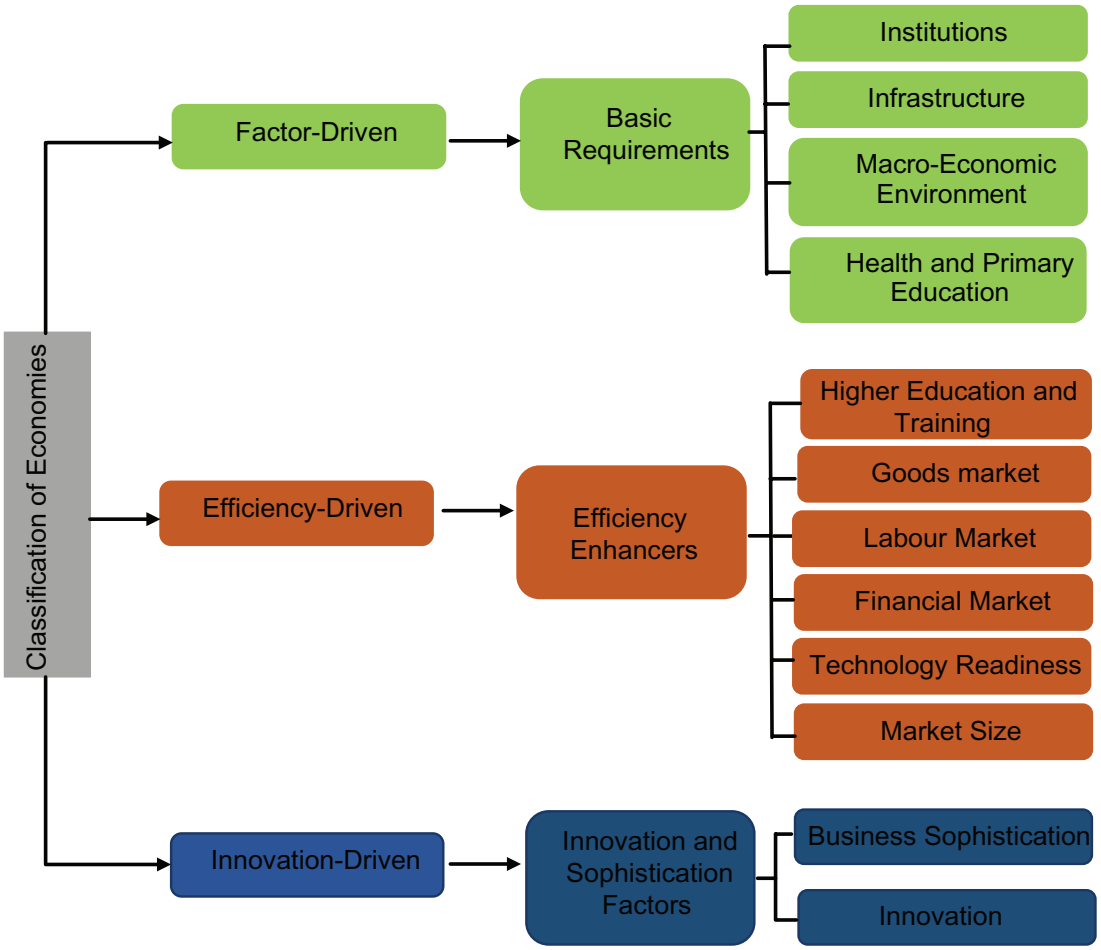
[2] "Hitting the Sweet Spot. The growth of the middle class in emerging markets". Ernst and Young report 2012

Undoubtedly, there are numerous challenges ahead for the economy. But, the government has been taking adequate measures to sustain the economy's growth momentum.

1.2 Classification of Economies

In line with the well-known economic theory of Stages of Development, the World Economic Forum (WEF) develops the Global Competitive Index (GCI) every year and classifies economies in three broad categories — factor-driven, efficiency-driven and innovation-driven. GCI assumes that in the first stage, an economy is factor-driven and countries compete based on their factor benefactions, primarily unskilled labour and natural resources. To maintain competitiveness at this stage, the economy primarily focuses on well-functioning public and private institutions, well-developed infrastructure, a stable macroeconomic environment, and healthy workforce with at least basic education. As the country becomes more competitive, productivity will increase and wages will rise with advancing development. Consequently, the economy will move into the efficiency-driven stage of development. At this point, competitiveness is increasingly driven by higher education and training, efficient goods markets, well-functioning labour markets, developed financial markets, ability to harness the benefits of existing technologies, and a large domestic or foreign market. Lastly, as the economy moves into the innovation-driven stage, wages will rise so much that they are able to sustain those higher wages and the associated standard of living, only if their businesses are able to compete with new and unique products. At this stage, companies must compete by producing new and different goods using the most sophisticated production processes and continuously innovating for new ones.

Figure 1.1: Classification of Economies



Source: Global Competitive Index, World Economic Forum

Table 1.2: Classification of Economies - A comparison of BRICS nations

	BRAZIL	RUSSIA	INDIA	CHINA	SOUTH AFRICA
Population	202.8 million	143.5 million	1259.7 million	1367.8 million	54.0 million
GDP (in USD)	2,353.0 billion	1,857.5 billion	2,049.5 billion	10,380.4 billion	350.1 billion
SME Contribution to GDP	27 percent	15 percent	9 percent	58 percent	45 percent
Ease of Doing Business Rank by the Wold Bank	116/189	51/189	130/189	84/189	73/189
Global Competitiveness Rank by the World Economic Forum	75/140	43/140	55/140	28/140	49/140
Economy Development Phase	Efficiency-Driven	Efficiency-Driven	Factor-Driven	Efficiency-Driven	Efficiency-Driven

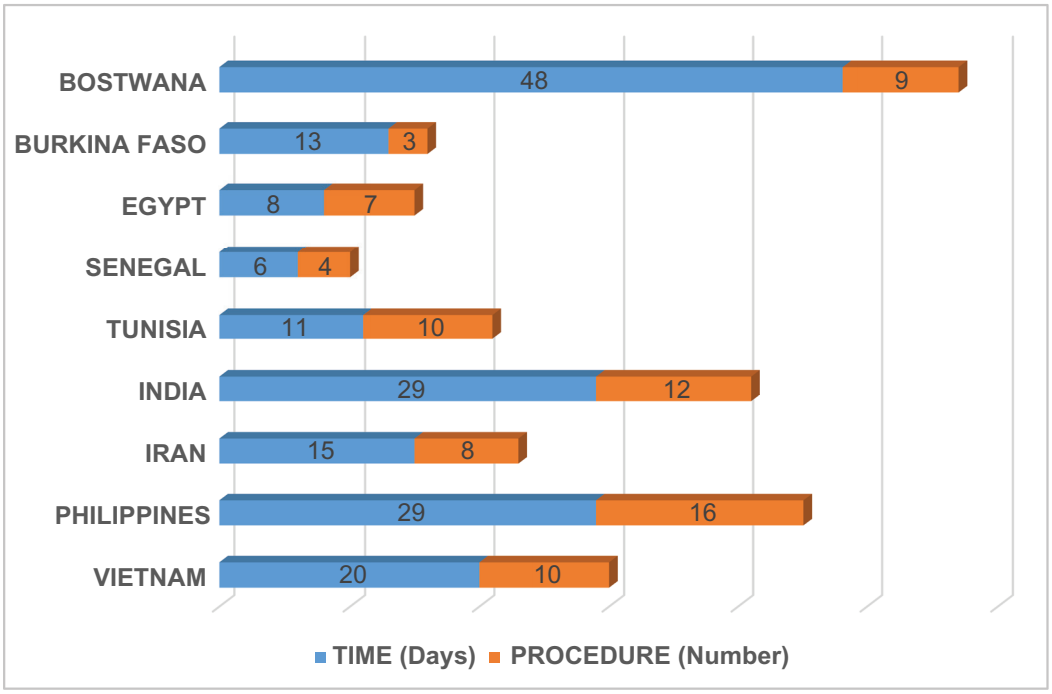
Source: Compiled from GEM Global report 2015-16/ Doing Business Report 2016, published by the World Bank/ Global Competitiveness Report 2016, published by the World Economic Forum

1.3 Doing Business in India

As one of the fastest growing economies in the world, India is undoubtedly a rising star. It has advantages of an emerging middle class, cost competitiveness and a large pool of human capital, which makes it an attractive investment destination. India has continuously improved its ranking on WEF's Global Competitiveness Report and climbed up to position 55 from 71 a year earlier[3]. Similarly, in World Bank's Doing Business Report, India ranked 130 out of a total of 189 countries[4] on account of significant progress across several parameters.

Starting a business in India has become considerably easier over the past few years. It now takes 26 days to register a company[5]. However there is still room for improvement. India lags behind in various practices when compared to other factor-driven economies like Iran, Burkina Faso, Egypt and Tunisia.

Figure 1.2: Starting a Business in Factor-Driven Economies, including India



Source: 'Doing Business Report 2016 - Measuring Quality and Efficiency', published by World Bank

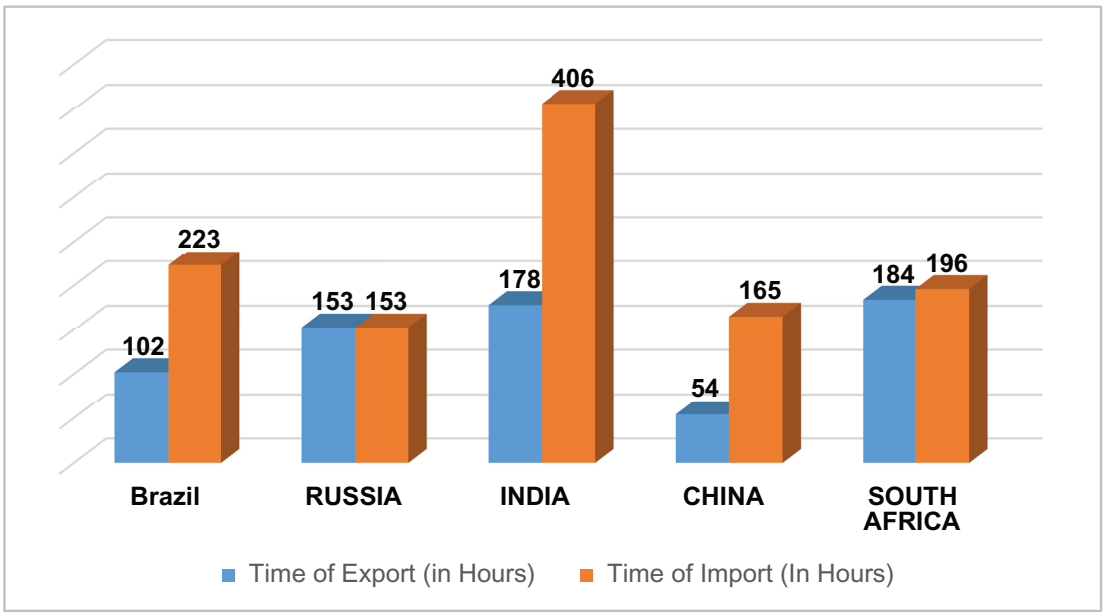
[3] Global Competitiveness Report 2016, published by World Economic Forum
[4] Doing Business Report 2016, published by World Bank
[5] Ibid

1.4 Trade and Business across BRICS Nations

India has come a long way in its business journey. It is an established fact that business opportunities in India sustain the livelihood of millions of people all across the globe. There is little difference in the way large multinationals operate in India as compared to other BRICS economies. Emergence of corporate hubs in the country, especially in Special Economic Zones (SEZs), has led to a paradigm change in business models and the overall trade architecture and attitudes.

The BRICS countries are natural candidates for more intense market exploitation, given their differentiated dynamism. This could contribute to reduced trade disequilibria in some sectors, such as manufacturing. But, this strategy relies upon actual access to these markets. Trade among countries soared after they gained recognition as a combination (although, of course, this is a period when trade between developing and emerging markets in general has grown much faster than the aggregate world trade). Investment links have been growing too, mainly through Chinese involvement in different countries and some interest shown by large Indian capital. More recently, there have been other moves that suggest an appetite for newer and varied forms of close economic as well as political interaction and coordination. In this regard, the documentation needed for trade between two or more countries is crucial. As per the Doing Business Report 2016, it is evident that several formal documentary and border compliances are still required to export/import goods and commodities among the BRICS nations. India has the maximum hours required, in terms of both export and import, in comparison to other BRICS nations.

Figure 1.3: Trading across BRICS Nations



Source: 'Doing Business Report 2016 - *Measuring Quality and Efficiency,* published by World Bank

1.5 India and China: The New Frontiers of World Economy

China and India are the two most populous countries in the world, with a total population of 1.38 and 1.31 billion, respectively[6]. They are also the two largest economies in terms of GDP in the world, next to the USA. Both India and China are drawing attention of the world economies and competing to acquire a greater share of the world trade and investment. While China's growth is attributed to its push in the manufacturing sector, service sector is the major driving force behind India's economic growth.

China is the manufacturing powerhouse of the world because of its developed infrastructure, pro-FDI (Foreign Direct Investment) policies and low-cost labour. It is also far ahead of India on a majority of macroeconomic and social indicators. However, China's population is set to age. India is poised to become the world's youngest country by 2020, with an average age of 29 years, which will account for around 28 percent of the world's total workforce. In comparison, during

[6] World Population Prospects: The 2015 Revision, published by United Nations Department of Economic and Social Affairs.

the same period, the average age in China is expected to be 37 years.[7] India also outscores China in terms of its democratic government and significant proportion of English-speaking population. Moreover, the minimum wages in China have increased over the years and its cost advantage has reduced.[8]

Despite some recent challenges, India's fundamental strengths are intact. It has a large, growing consumer base and strong democratic institutions. Over a 10-year period, India's middle class has grown by over 350 million. No other country can match such a pace of growth.

However, there are debates around the intellectual corner on whether India should follow China's steps for encouraging industrial growth. India needs to leapfrog in creating a manufacturing-driven economy and has to move vast majority of its workforce from farming to non-farming activities. It needs to follow a more balanced approach by integrating services and manufacturing sectors together towards the transition. Several reforms have been initiated for this mission. The National Manufacturing Policy of 2011 aims to create 100 million jobs in the manufacturing sector by 2022 and also increase the share of manufacturing in GDP to 25 percent[9]. In 2014, with the National Democratic Alliance (NDA) coming to power at the centre, there have been several reforms to catalyse the growth of manufacturing in the country.

1.6 An Overview of the Key Policies

a. Make in India

b. Skill India

c. Start Up India, Stand Up India

Make in India scheme Highlights[10]

- Launched in the year 2014 with the aim of boosting industrial growth and making the country a global manufacturing hub. The programme aims to enhance manufacturing through initiatives designed to facilitate investment, foster innovation, protect intellectual property and build best-in-class manufacturing infrastructure.
- Make in India and other development initiatives are expected to help the country grow at an average rate of 8.8 percent annually during the period 2015-25.
- Make in India initiative aims at increasing manufacturing sector's share in the GDP from 16 to 25 percent by 2022.
- The initiative is expected to revive the manufacturing sector and make it self-reliant. Manufacturing sector grew at an annual average rate of 5.77 percent during 2011-15 and Make in India initiative will push this growth rate up to 12-14 percent over the next three to five years.
- Make in India initiative is expected to create additional employment opportunities for about 100 million people by 2022.

Make in India initiative is expected to increase the amount of FDI coming into the country.

India improved its Ease of Doing Business ranking to 130 in 2016 by constantly working on parameters that address investors' concerns on conducting business in India. The Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce and Industry, in partnership with the World Bank Group, have undertaken an assessment of State's Implementation of Business Reforms 2015-16.[11]

This assessment studies the extent to which states have implemented DIPP's 340-point Business Reform Action Plan (BRAP) for states/UTs, covering the period July 1, 2015 to June 30, 2016. BRAP includes recommendations for reforms on 58 regulatory processes, policies, practices or procedures, spread across 10 reform areas, spanning the lifecycle of a typical business. Based on percentage scores, the states were classified into four categories – Leaders with an overall implementation status of 90-100 percent, Aspiring Leaders with implementation status between 70-90 percent, Acceleration required for states with implementation status between 40-70 percent and Jumpstart needed for states with implementation status between 0-40 percent. All these initiatives are expected to help India climb up the 'Doing Business' rankings in the near future.

[7] "State of the Urban Youth, India 2012," UN Habitat, April 2013, p.123

[8] "China to Boost Minimum Wage 20 percent Annually for Five years, Morning Post says" Bloomberg Website,www.bloomberg.com

[9] National Manufacturing Policy 2011 published by Department of Industrial Policy and Promotion (DIPP) downloaded from http://dipp.nic.in/English/policies/National_Manufacturing_Policy_25October2011.pdf

[10] Make in India Schemes downloaded from http://www.makeinindia.com

[11] Assessment of State Implementation of Business Reforms 2015, published by DIPP

Table-1.3: Assessment of State Implementation of Business Reforms 2015-16

2016 Rank	State	2015 Rank
1	**Andhra Pradesh**	**2**
2	**Telangana**	**13**
3	**Gujarat**	**1**
4	**Chhattisgarh**	**4**
5	**Madhya Pradesh**	**5**
6	**Haryana**	**14**
7	**Jharkhand**	**3**
8	**Rajasthan**	**6**
9	**Uttarakhand**	**23**
10	**Maharashtra**	**8**
11	**Odisha**	**7**
12	**Punjab**	**16**
13	**Karnataka**	**9**
14	**Uttar Pradesh**	**10**
15	**West Bengal**	**11**
16	**Bihar**	**21**
17	**Himachal Pradesh**	**17**
18	**Tamil Nadu**	**12**
19	**Delhi**	**15**
20	**Kerala**	**18**
21	**Goa**	**19**
22	**Tripura**	**26**
23	**Daman & Diu**	**--**
24	**Assam**	**22**
25	**Dadra & Nagar Haveli**	**--**
26	**Puducherry**	**20**
27	**Nagaland**	**31**
28	**Manipur**	**--**
29	**Mizoram**	**28**
30	**Sikkim**	**27**
31	**Arunachal Pradesh**	**32**
31	**Jammu & Kashmir**	**29**
31	**Chandigarh**	**24**
31	**Meghalaya**	**30**
31	**Andaman & Nicobar islands**	**25**
31	**Lakshadweep**	**--**

Source: Assessment report of State Implementation of Business Reforms 2015-16, published by Department of Industrial Policy and Promotion (DIPP), Government of India

1.7 Skill India Programme

By 2030, India is expected to have the largest labour force in the world, with more than 12 million people joining the workforce annually[12]. At this pace, the country needs to create ample job opportunities for all of them. The skill development initiative is aimed at bridging this gap between understanding the needs of the market and preparing the youth for the same.

Ministry of Skill Development and Entrepreneurship was set up in November 2014 to add impetus to the Skill India agenda. The National policy on Skill Development and Entrepreneurship 2015 aims to provide an umbrella framework to all skill development activities being carried out within the country. The National Skill Development Corporation (NSDC) has identified major sectors and projected employment scenarios given below in Table 1.4.

Table 1.4: A projection of Employment Scenarios in Major Sectors

Sector	Employment base in 2015 (in million)	Projected employment by 2020 (in million)	Projected employment by 2025 (in million)	Increase in employment between 2015 and 2025 (in million)
Auto and auto components	11	12.4	14.4	3.4
Food processing	7	8.5	11	4
Retail	38.6	43.7	54	15.4
Handloom and handicrafts	11.7	13.5	17.2	5.6
Tourism, hospitality and travel	7	9.4	13	6.1
Building, construction and real estate	45.4	57.5	74.2	28.7
Textile and clothing	15.2	17.5	20.9	5.6
Other sectors	323.6	328.4	355.8	32.2
Grand total	459.5	490.9	560.5	101

Source: NSSO 68th Round EU Survey, Industry Estimates, NSDC Skill Gap Studies, KPMG in India analysis; Data excludes mining, quarrying and other allied activities.

Start Up India, Stand Up India

The Start Up India scheme was launched on January 16, 2016. The aim of the scheme was to promote entrepreneurship among the educated youth. The Start Up India action plan was unveiled with an aim to build a strong ecosystem for nurturing innovation in order to accelerate economic growth and generate employment opportunities. The action plan mentions several initiatives catering to areas such as general, regulatory, taxation and others areas mentioned below.

a. Compliances based on self-certification
b. Start-up India hub
c. Establishment of a corpus of ₹10,000 crore to fund start-ups
d. Credit guarantee fund for start-ups
e. Start-up fest
f. Atal Innovation Mission (AIM)
g. Setting up incubators
h. Innovation of centres
i. Research parks
j. Promote entrepreneurship in biotechnology
k. Innovation-focused programmes for students
l. Annual Incubator Grand Challenge

The regulatory initiatives include

a. Mobile app and portal for easy accessibility for registration and compliances
b. Faster exit for start-ups
c. Legal support and fast tracking of patent applications
d. Relaxed norms of public procurement for start-ups

The tax-related initiatives include.

a. Capital gain tax exemption
b. Income tax exemption for three years
c. Tax exemption for investment made above fair market value

[12] "Government sets target to skill 500 million people by 2022,' The Times of India, 10 January 2012, The Times of India Group.

Along with the above mentioned policy initiatives, a ₹2,000 crore India Aspiration Fund (IAF) was launched by SIDBI in August 2015 to boost the start-ups' fund-of-funds ecosystem in the country. Along with IAF SIDBI's Make in India Loan for Small Enterprises (SMILE) scheme of ₹10,000 crore was also launched to catalyse tens of thousands of crores of equity investment in start-ups and Micro, Small and Medium Enterprises (MSMEs), creating employment for millions of people, mostly educated youth over the next four to five years[13].

Government of India launched MUDRA Yojana in April 2015 with a corpus of $3.1 billion and a credit guarantee fund of approximately $470 million. The objective is to provide financial and credit support to the Micro Finance Institutions (MFI) and other agencies, which lend money to small businesses and individuals[14].

It would also help in registering all MFIs and introducing a system of performance rating and accreditation, thus helping the last-mile borrowers of finance to evaluate and approach the best MFIs. Together, the three finance schemes should boost start-ups as well as MSMEs already in the transition phase so as to create a good number of jobs in the years to come.

1.8 Entrepreneurship Development in 21st Century- A Background

Entrepreneurship is widely recognised as the engine of economic and social development throughout the world. Several converging factors suggest that 21st century will be the century of entrepreneurs. Against a backdrop of volatility, uncertainty and complexity in the global economic scenario, entrepreneurs can act as agents of change by confronting the challenges on account of their agility, innovative mindset, ability to ride the wave of new technology and attract talented young professionals. They are ready to play a key role in fostering prosperity for the 21st century by being a powerful engine for global growth, innovation and employment.

McKinsey has developed a composite index to measure the quality of entrepreneurial context of a nation, which rests on three pillars - a fertile entrepreneurial ecosystem, financing new ventures and infusing an entrepreneurial culture. It is shown in Table 1.5 given below.

Table 1.5: Three Pillars of Entrepreneurial Context

Ecosystem	Financing	Culture
• **Protective and fluid environment** ► Intellectual property protection ► Ease of doing business ► Judicial independence ► Low level of irregular payments and bribes • **Quality of education** ► Quality of management schools ► Overall quality of the education system • **Burden of tax and regulation** ► Burden of government regulation ► Extent and effect of taxation • **Collaboration** ► State of cluster development – University-industry collaboration in R&D ► Administrative burden in starting a business ► Number of procedures ► Time required ► Cost of starting a business	• Ease of access to loans • Perception of venture capital availability • Financing through local equity market • Value per capita of venture capital investment • Number of venture capital deals	• **Perception of personal capabilities and opportunities** • Perceived opportunities • Perceived capabilities • **Perception of entrepreneurship** • Entrepreneurship seen as a good career choice • High social status for successful entrepreneurs • **Attention to entrepreneurship** • Media attention on entrepreneurship • Role of schools in helping understand entrepreneurship • **Inclination to entrepreneurship** • Entrepreneurial intentions • Fear of failure

Source: "The Power of Many", McKinsey Report 2011

[13] "Arun Jaitley launches India Aspiration Fund to Boost Start-Ups in the country" The Economic Times of India, 19th August 2016
[14] India Soars High February 2016 by KPMG

1.9 Entrepreneurship Ecosystem - A Background

Fostering entrepreneurship has become a core component of economic development in countries around the world. The predominant metaphor for fostering entrepreneurship as an economic development strategy is the Entrepreneurship Ecosystem. The term 'ecosystem' was originally coined by James Moore, in an influential article in *Harvard Business Review* published during the 1990s[15]. He claimed that businesses do not evolve in a 'vacuum' and noted the relationally embedded nature of how firms interact with suppliers, customers and financiers.

Entrepreneurship Ecosystem can be defined as 'a set of interconnected entrepreneurial actors (business angels, banks), institutions (universities, public sector agencies, financial bodies) and entrepreneurial processes (such as the business birth rate, number of high-growth firms, levels of 'blockbuster entrepreneurship', number of serial entrepreneurs, degree of sell-out mentality within firms, levels of entrepreneurial ambition), which formally and informally coalesce to connect, mediate and govern the performance within the local entrepreneurial environment'[16]

In recent years, a particularly influential approach has been developed by Daniel Isenberg at the Babson College, who has articulated what he refers to as an 'entrepreneurship ecosystem strategy for economic development'. He maintains that such an approach constitutes a novel and cost-effective strategy for stimulating economic prosperity. According to him, this approach potentially 'replaces' or becomes a 'pre-condition' for the successful deployment of cluster strategies, innovation systems, knowledge economy or national competitiveness policies. He identifies six domains within the entrepreneurial system: a conducive culture, enabling policies and leadership, availability of appropriate finance, quality human capital, venture-friendly markets for products and a range of institutional support.[17]

1.10 Entrepreneurship Development in India

Entrepreneurship is not new to India. According to the India Industrial Commission Report (1916-1918), "At a time when the West of Europe, the birth place of modern industrial system, was inhabited by uncivilized tribes, India was famous for the wealth of her rulers and for high artistic skill of her craftsmen. And even at a much later period, when the merchant adventures from the West made their first appearance in India, the industrial development of this country was, at any rate, not inferior to that of the more advanced European nations." Passing through time, the Indian economy, across its several stages, could not promote entrepreneurship as a means for self-employment on a large scale. The amount of efforts put forth by establishment of government bodies, and institutions along with key policy frameworks, has witnessed a rise in the number of entrepreneurial ventures, yet most of them are termed as necessity entrepreneurs rather than opportunity entrepreneurs.

The 21st century India is a young country with more than 62 percent of its population in the working age group (15-59 years) and more than 54 percent of its total population below 25 years of age. This is an advantageous factor as studies have found that nascent entrepreneurship prevalence rates are highest in the 25-34 age groups. But, this demographic dividend could prove to be the albatross across our neck, if we are not able to engage our youth in creative pursuits by developing appropriate skills, including entrepreneurship skills. As of now, only about five to six percent of the youth has access to any kind of skills.

To transform the youth into entrepreneurs, Indian Government has developed policies and programmes for enhancing their innovation capacity. The Government has declared 2010-2020 as the "Decade of Innovation" and has set up the National Innovation Council to develop a culture of inclusive innovation.[18] The Science, Technology, and Innovation Policy, 2013 aims to position India among the top five global scientific powers by the year 2020. Under this policy, the Government aims to increase the gross expenditure on scientific research and development to two percent of the GDP. The policy also contains plans to establish Technology Business Incubators (TBIs) and science-led entrepreneurship institutions. However, given its innovation

[15] "Predators and Prey: A new Ecology for Competition" Harvard Business Review, May-June 1993 Issue
[16] "Entrepreneurial Ecosystem and Growth" Working paper published by OECD, 2014
[17] "Six domains of Entrepreneurial Ecosystem" developed by Daniel Isenberg (2011) at Babson college
[18] Decade of Innovation:2010-2020 Roadmap, national Innovation council Website, www.Innovationcouncil.gov.in

potential, India is underperforming. Its ranking on the Global Innovation Index fell from 66 in 2013 to 81 in 2015.[19]

The National Entrepreneurship Network (NEN) is working with numerous campuses across India to promote entrepreneurship among the youth.[20] Another initiative taken by the government to encourage collaborative research is the Australia-India Strategic Research Fund.[21] Start Up India scheme is meant to provide a hard push to the entrepreneurship and start-up landscape in the country. With the rising number of incubators, angel networks, and early-stage venture capital funds, the country's start-up ecosystem is developing gradually. Institutes such as the Centre for Innovation, Incubation and Entrepreneurship (CIIE) and the Entrepreneurship Development Institute of India (EDII) are some of the frontrunners. EDII has been instrumental in propagating entrepreneurship awareness and training since three decades. It has launched several initiatives through its centres across the country. One such initiative is to initiate the Start-up Village Entrepreneurship Programme (SVEP) in 23 states to create sustainable self-employment opportunities for a large number of youth residing in the villages. The All India Council for Technical Education (AICTE) has also released its Start-Up Policy for higher education institutions to promote innovation and entrepreneurship. All of these can provide much needed momentum to the sector and promote a distinct culture of entrepreneurship in India.

1.11 Start-up Ecosystem in India

Start-ups have been the flavour of the season over the past few years in the Indian markets. Start-ups are new businesses. The kinds of new start-ups that offer opportunities for growth and employment generation are generally considered to be the ones that are innovating, driven and looking to scale.

1.12 Definition of a Start-Up[22]

The Department of Industrial Policy and Promotion (DIPP), Govt. of India, via a gazette notification in February 2016, declared that an entity shall be considered as start-up:

a) If it has completed five years from the date of its incorporation/ registration,

b) If its turnover for any of the financial years has not exceeded $250 million, and

c) If it is working towards innovation, development, deployment or commercialisation of new products, processes or services driven by technology or intellectual property.

India has witnessed unparalleled growth in start-ups over the past five years, following the success stories of technology-based companies like MakeMyTrip.com and Naukri.com a decade ago. During the past financial year, 98,473 new companies were incorporated in India[23].

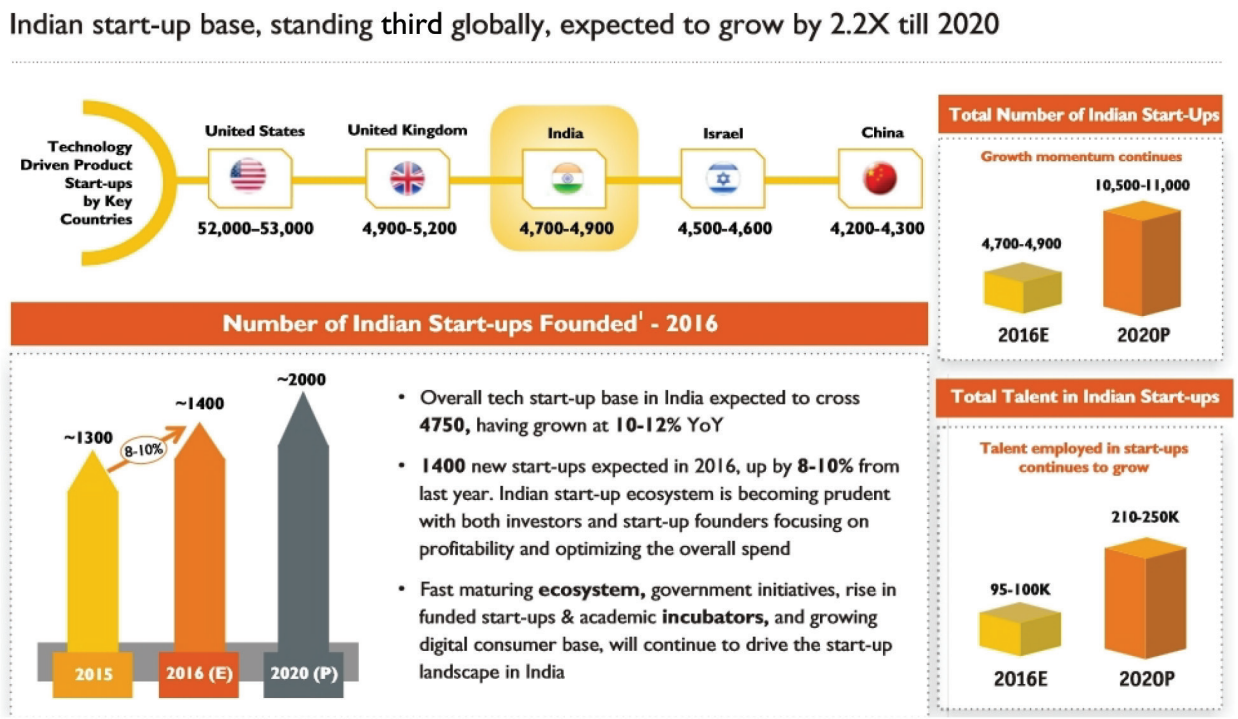
1.13 Technopreneurship in India

India has a very large number of micro and small enterprises across various sectors. However, existing surveys and studies on start-ups focus on those that use technology. The focus on start-ups in India has, therefore, come to primarily focus on innovative, small companies leveraging technology to solve consumer problems. According to a recent study by NASSCOM in 2016, India has around 4,750 start-ups and is ranked third in the start-up ecosystem globally.[24] These start-ups have generated employment for close to 85,000 people and secured funding of about $3.8 billion. The ecosystem for both technology and traditional start-ups has been expanding at a rapid pace. This has resulted in the emergence of a number of home grown unicorns across the country, including Flipkart, Snapdeal, OLA, Paytm and others. There has been a significant rise in the number of incubators and accelerators in India, and currently 140 of these are operational. This number is growing at a rate of 40 percent Year-over-Year (YoY) in 2016.[25] Majority of the 1,200 new start-ups are Business to Consumers (B2C) and their focus tends to be on information technology- enabled

[19] "India Ranks 81 among 141 countries in the Global innovation Index". Business Standard, 18 September 2015, Business Standard Publishing Ltd.
[20] Creating a Culture of Innovation, Mint, 10 December 2012, Hindustan Times, HT Media Ltd.
[21] Australia-India Strategic Research Fund (AISRF), Ministry of Science and Technology. DSIR, January 2013, p.2
[22] Department of Industrial Policy and Promotion (DIPP) Gazette Notification, February 2016
[23] A Snapshot of India's Start-up Ecosystem 2015, A report based on the Start-up Conclave 2015 at New Delhi
[24] "Indian Start-up Ecosystem maturing" NASSCOM-Zinnov report 2016 Edition
[25] Ibid, Pg.42

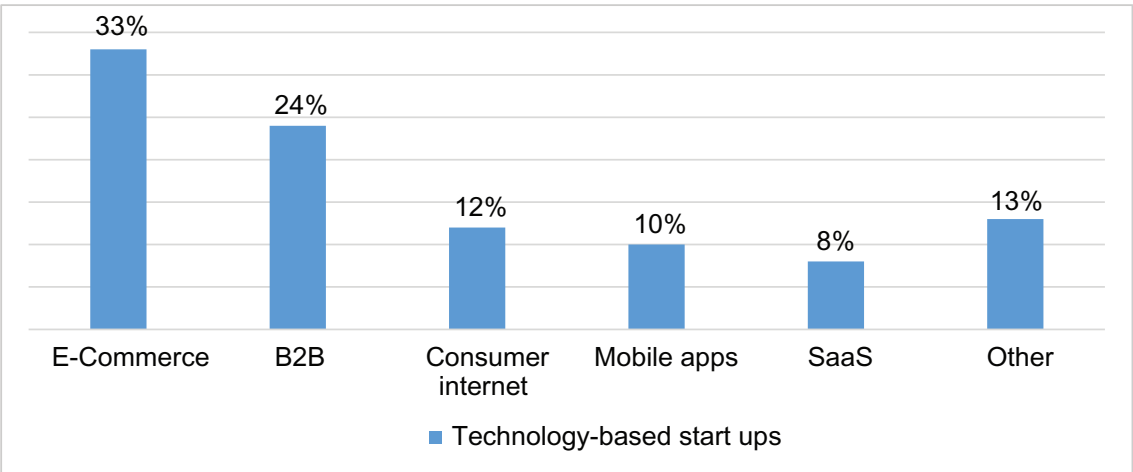
products and services including e-commerce, aggregators, analytics, internet, health-tech, edutech, online payments, cloud/ big data, IoT and artificial intelligence. However, the ecosystem today is constrained to a small segment of start-ups with its focus on technology and ICT. About 80 percent of investment is focused on technology and of that, 80 percent is especially focused on mobile solutions, with a majority being diverted to enterprises based in cities like NCR, Bengaluru and Mumbai.[26] The growth of technology-intensive enterprises results in the rise of innovation. According to the data published by DIPP, for the year 2014-15, the total number of patents applied by India was 42,763, of which 5,978 were granted.[27]

Figure 1.4: Indian Tech Start-up Ecosystem - An Overview



Source: India Start-up Ecosystem Maturing 2016, published by NASSCOM

Table 1.6: Technology-based start-ups in India segment-wise



Source: India Start-up Ecosystem Maturing 2015, published by NASSCOM

[26] CII Start-up Conclave Panel,2015

[27] The Patent filed and granted data was for the period 2014-15, published by Department of Industrial Policy and Promotion (DIPP), Government of India

As of 2015, India occupies approximately 56 percent market share in the services, sourcing business globally. India's technology and Business Process Management (BPM) sector has generated revenues of $146.5 billion with a growth rate of 23.72 percent. The contribution of the IT sector to India's GDP rose to approximately 9.5 percent in FY15 from 1.2 percent in FY98. India's highly-qualified talent pool of technical graduates is one of the largest in the world, facilitating its emergence as a preferred destination for outsourcing. Computer science/ information technology accounts for the biggest chunk of India's fresh engineering talent pool, with more than 98 percent of the colleges in the country offering this stream.[28]

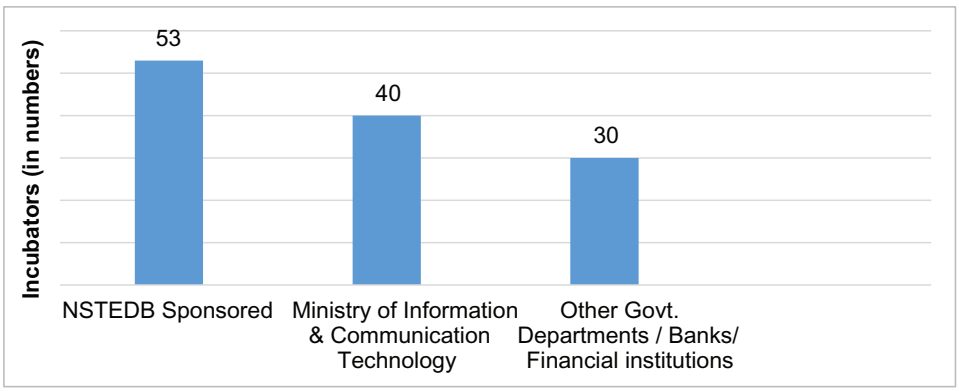
1.14 Scope for growth of Technology Entrepreneurship in India

The Science and Technology Policy (2003) provided for strengthening of science and technology infrastructure in academic institutions, especially the universities, engineering colleges and medical institutions. Policy measures were announced to ensure the induction of quality, skilled human resource capital and provisions were made for the mobility of scientists and technologists between industry, academic institutions and research laboratories.[29] Indian government aims to build an ecosystem that promotes entrepreneurship at the start-up level and has taken a number of initiatives to ensure that the start-up businesses get appropriate support. Policy initiatives like Make in India, Stand Up India, Digital India and financial assistance and start-up exchange companies are investing in Indian start-ups. The Union Budget 2015 set aside ₹1,000 crores for assistance to start-ups[30]. A rising number of corporates are in search of diverse informative, creative people. During FY 2013-15, the yearly Compound Annual Growth Rate (CAGR) reached 153 percent in number of investments, with a yearly growth of 127 percent in total value of investments.[31]

1.15 Technology Business Incubators (TBIs) in India

Technology Business Incubators (TBIs) are proposed to be promoted in following selected thrust areas, which have the potential for faster growth: ICT, biotechnology, new materials including nano materials, Instrumentation and Maintenance manufacturing and engineering, design and communication (media and infotainment), health and pharmaceuticals, agriculture and allied fields and energy and environment[32]. TBIs are aimed at achieving objectives like new venture creation, technology commercialisation, interfacing and networking and R&D for industry. There are approximately 120 TBIs in the country. Of these, 53 are promoted by the National Science and Technology Entrepreneurship Development Board (NSTEDB), Department of Science and Technology (DST), Government of India; 40 are Software Technology Parks (STPs) promoted by the Ministry of Information and Communication Technology; and the remaining 30 are promoted by other government departments/banks and financial institutions as well as private companies.

Table 1.7: TBIs in India



Source: http://www.startupindia.gov.in/.

[28] IBEF report, 2016.
[29] Rohatagi D and Rao K. (2016). The Contribution of Various Government Policies and Schemes in Facilitating and Fostering an Inclusive, Innovative, Technology Enabled Stable Industrial Growth with Enhanced R&D Investments.
[30] Union Budget, 2015-16.
[31] NASSCOM Ecosystem Start-up report, 2015
[32] TBI report, NSTEDB

CHAPTER 2

ENTREPRENEURSHIP IN FOUR STATES

(GUJARAT, MADHYA PRADESH, CHHATTISGARH, JAMMU & KASHMIR)

2.1 Global Entrepreneurship Monitor (GEM) India - A Historical Perspective

GEM research was initiated in India by the N S Raghavan Centre for Entrepreneurial Learning (NSRCEL) at IIM Bangalore in 2001. Following the successful accomplishment of GEM India Research Project 2001, it was again undertaken in the year 2002. Back then, the GEM research model was in its nascent stage and the 'Assessment of Entrepreneurial Activity' in India was a novel concept. Mathew J Manimala (NSRCEL, IIM-B) conducted the GEM India Survey during 2001 and 2002, under the GEM Research Project, and delivered his research work in the form of two annual reports. Subsequently, during 2006-2008, a team comprising I M Pandey, Ashutosh Bhupatkar and Janki Raman from the Pearl School of Business, Gurgaon conducted the GEM India study. The surveys were conducted over a period of three years and the data was subsequently featured in GEM Global Reports 2006, 2007, and 2008, respectively. However, the GEM India team could not publish its national report during the same period. Moreover, due to some reasons, the GEM India study was not undertaken in the succeeding years (2008-2011).

GEM India Study (2012-2015)

In 2011, with an aim of continuing with the GEM India study, the heads of three leading institutions — Dinesh Awasthi (EDII), Krishna Tanuku (Wadhwani Centre for Entrepreneurship Development, ISB, Hyderabad) and Bibek Banerjee (IMT Ghaziabad), along with Vijay Vyas (Faculty, Portsmouth Business School, UK) and Mathew J Manimala (NSRCEL, IIM-B) discussed the possibility of forming the GEM India Consortium, 2012–2015. Finally, three leading institutions — EDII, ISB, and IMT Ghaziabad formed a national-level Consortium by signing a Memorandum of Understanding (MoU). 'GEM India Plus' Consortium was formed on February 2, 2012 for conducting the study over a period of three consecutive years, 2012-2015. All three partners unanimously agreed to nominate EDII as the Lead Institution and Sunil Shukla (Director, EDII) as the Team Leader. As per the stipulated requirements, 'GEM India Plus' Consortium conducted research studies during the year 2012, 2013, and 2014. GEM National Report, 2014 featured the study results conducted in the year 2014.

GEM India Study (2015-18)

To continue with the GEM India study, 'GEM India Plus, 2012–2015' Consortium was reconstituted. The present 'GEM India Team' comprises EDII, Centre for Entrepreneurship Development Madhya Pradesh (CEDMAP, Bhopal) and Jammu & Kashmir Entrepreneurship Development Institute (JKEDI, Srinagar). The three institutions signed a MoU on April 11, 2015 at EDII, Head Office for the next three annual GEM studies commencing from April 2015. The institutions agreed to fulfil the GEM annual cycle and other obligations, in a time-bound manner, to suit GEM's global schedule.

2.2 About The GEM India Partner Institutions

Being a pioneer in entrepreneurship education and research in India, EDII took the initiative of continuing GEM India studies by reforming the Consortium with new partners. For this, EDII initiated dialogue with two state-level institutions practicing entrepreneurship – CEDMAP, Bhopal and JKEDI, Srinagar. As a result, their individual strengths, capabilities and enthusiasm for working together as partner institutions led to the formation of the GEM India Consortium in April 2015.

2.2.1 Entrepreneurship Development Institute of India (EDII)

An internationally acknowledged institution with over three decades of engagement for facilitating entrepreneurship development, EDII has carved a niche for itself. It has been instrumental in setting up 12 state-level exclusive entrepreneurship development centres and institutes. EDII has also played a pivotal role in entrepreneurship education by engaging in partnerships with and guiding a large number of schools, colleges, science and technology institutions, and management schools in several states. It has helped these institutions embrace entrepreneurship inputs in their curricula. In view of EDII's expertise in its field, the University Grants Commission has assigned EDII the task of developing curriculum on entrepreneurship. Gujarat Textbook Board has also assigned EDII the task of developing textbooks on entrepreneurship for 11th and 12th Standards. At the international level, to institutionalise entrepreneurship movement, the institute has established EDII-like affiliate institutes in Cambodia, Lao PDR, Myanmar and Vietnam. Presently, it is in the process of setting up entrepreneurship development institution in Uzbekistan.

In order to broaden the frontiers of entrepreneurship research, EDII has established a Centre for Research in Entrepreneurship Education and Development (CREED), to investigate into a range of issues surrounding small and medium enterprises sector

through its publication, *The Journal of Entrepreneurship.* This centre has established a network of researchers and trainers through a Biennial Conference on Entrepreneurship Education and Research. In the international arena, efforts to develop entrepreneurship by way of sharing resources and organising training programmes have helped EDII earn accolades and support from the World Bank, Commonwealth Secretariat, United Nations Industrial Development Organization (UNIDO), International Labour Organization (ILO), Friedrich-Naumann-Stiftung (FNSt), British Council, Ford Foundation, European Union, Association of South East Asian Nations (ASEAN) Secretariat and several other renowned agencies. In recognition of its international achievements, the United Nations Economic and Social Commission for Asia and the Pacific (UN-ESCAP), Bangkok, Thailand has declared EDII as a 'Centre of Excellence'.

2.2.2 Centre for Entrepreneurship Development Madhya Pradesh (CEDMAP)

The Centre for Entrepreneurship Development Madhya Pradesh (CEDMAP) has achieved enormous success in the field of entrepreneurship development activities in the state of Madhya Pradesh and Chhattisgarh over a span of 25 years.

CEDMAP, promoted by the state government of Madhya Pradesh, central financial institutions as well as leading banks of the state, is an autonomous body and not-for-profit institution set up in the year 1988, registered under the Firms & Societies Act 1973. CEDMAP, being an ISO 9001:2008 certified institution, enjoys the status of a premiere institution for undertaking various entrepreneurship skills as well as livelihood development activities in the states of Madhya Pradesh and Chhattisgarh.

The Centre has been actively imparting several training programs including Entrepreneurship Development Programme (EDP), Rani Durgawati Swarojgar Yojana (RDSY), Pradhan Mantri Swarojgar Yojana (PMRY), Entrepreneurship Awareness Camps (EACs), Skill Training for DUDA/DST, Mid-Day Meal Scheme (MDM), Self Help Groups (SHGs), training officials of Government, Teachers Training Programmes (TTPs) and others, besides human resource development and training for the Central and State Government employees. CEDMAP also offers vocational training programmes in areas such as mobile repairing, soft toys, leather goods, automobile repair, welding, electrician training, nursing, food processing and agro-based training.

Apart from providing training, CEDMAP has started a community college in collaboration with IGNOU. This college offers numerous skill refresher courses for increasing self-employability.

CEDMAP is also undertaking a financial inclusion drive in the state. CEDMAP has created opportunities for youth in the villages to become Village-level Entrepreneurs (VEs) and reach out to millions of the financially excluded within the state.

2.2.3 Jammu & Kashmir Entrepreneurship Development Institute (JKEDI)

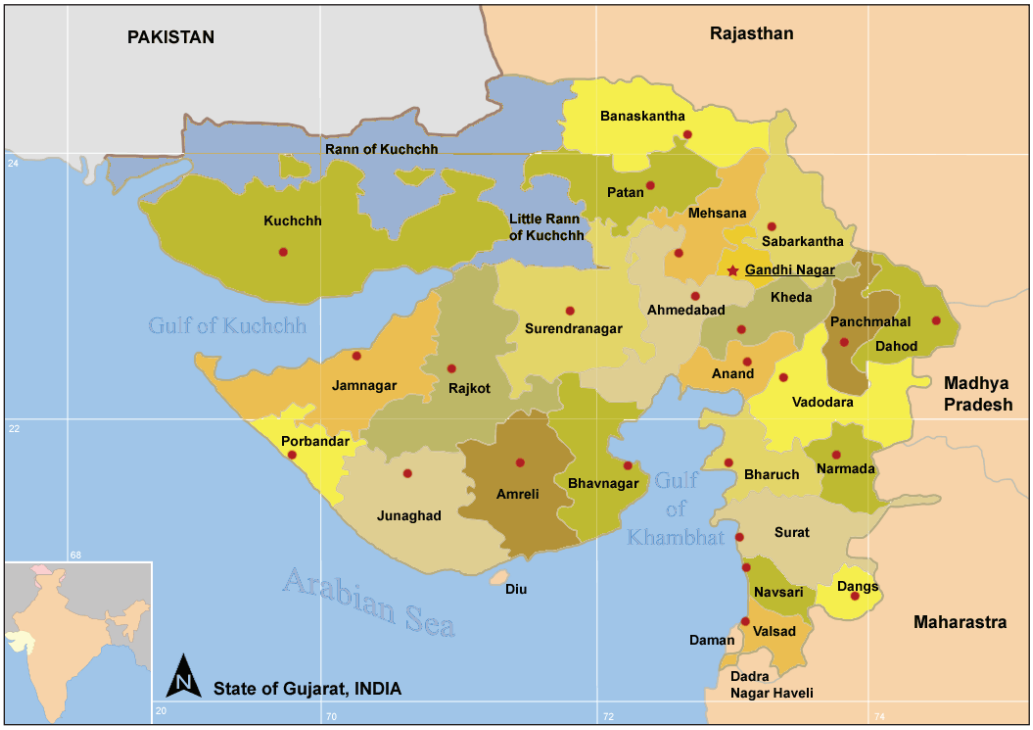
Jammu and Kashmir Entrepreneurship Development Institute (JKEDI) has been established by the Government of Jammu and Kashmir in March 1997 to effectively enable entrepreneurship development in the state. The institute started its regular activities from February 2004 and has positioned itself as a learning center par excellence with state-of-the-art regional centers across Jammu, Kashmir, and Ladakh. Besides, JKEDI Community Organizers are in all of the 22 districts enabling entrepreneurship and promoting development at the grassroots.

The Institute maintains and constantly improves its distinctiveness as a premier multidisciplinary development institution through cross-cutting approaches of awareness, training, consultancy, and investment in entrepreneurship, education, and research.

Besides, JKEDI implements a host of government sponsored employment schemes, which inter-alia include Seed Capital Fund Scheme (SCFS) and Youth Start-up Loan Scheme (YSLS). JKEDI is also functioning as an additional State Channelizing Agency for National Minorities Development & Finance Corporation (NMDFC) Schemes, Ministry of Minority Affairs, Government of India. Presently, the Institute is implementing the educational and term loan schemes of the said corporation. Under these schemes, credit facility is provided to the targeted beneficiaries of the state belonging to the minority communities.

The Institute is also partnering with the Ministry of Rural Development, Government of India, for the implementation of the central government-sponsored self-employment component of Himayat Scheme. As per the provisions of the scheme, the institute has to provide three weeks entrepreneurial residential training and network 60% of the trained youth with various financial institutions for availing of

Figure 2.1: District Map of Gujarat



credit facility so as to enable them to start their business ventures.

JKEDI is playing a pivotal role in building an enabling ecosystem in the state for entrepreneurship development. It has become a "one-stop solution" for aspiring entrepreneurs and has been actively reaching out to beneficiaries and guiding them in building competencies to start their own ventures.

2.3 Overview of Entrepreneurship Ecosystem in the states of Gujarat, Madhya Pradesh, Chhattisgarh and Jammu & Kashmir

2.3.1 Gujarat State Profile

Gujarat is a state in north-western India, sharing its borders with Pakistan and Rajasthan in the north-east, Madhya Pradesh in the east, Maharashtra and the Union Territories of Diu, Daman, Dadra Nagar Haveli in the south. The Arabian Sea borders the state on the west as well as south-west. The state is spread over an area of 1,96,024 sq. km with a population of 62.7 million. The literacy rate of the state is about 79%.

The Business Environment in Gujarat

The average annual Gross State Domestic Product (GSDP) growth rate of Gujarat from 2004-05 to 2015-16 was 12.02%. Gujarat has achieved the distinction of being one of the most industrially developed states and contributes about a quarter to India's goods exports. According to the assessment conducted by DIPP, Gujarat has secured third rank in 2016. The state's structural advantages such as its long coastline, deep-sea ports and presence of a large business community with a strong entrepreneurial culture contributed to its fast pace of growth. These factors were further bolstered by its well-functioning administrative machinery and massive investment in infrastructure, especially in the power and logistics sector. Gujarat is a leader in industrial sectors such as chemicals, petrochemicals, dairy, drugs and pharmaceuticals, cement and ceramics, gems and jewellery, textiles and engineering.

The industrial sector comprises over 800 large industries and more than 4,53,339 MSME industries. Gujarat paired the manufacturing thrust with focused efforts to improve agricultural productivity and service sector growth. The state's agricultural GDP growth rate increased from under 2% per year in the 1980s and 1990s to more than 6% per year during the period 2000 - 2013. More recently, the state has started focusing on tourism as the next sunrise sector with a steady rise in the inflow of tourists.

The Start-up Scenario in Gujarat

The state of Gujarat has always been renowned for its entrepreneurial culture in the country. Apart from hosting a vibrant business community

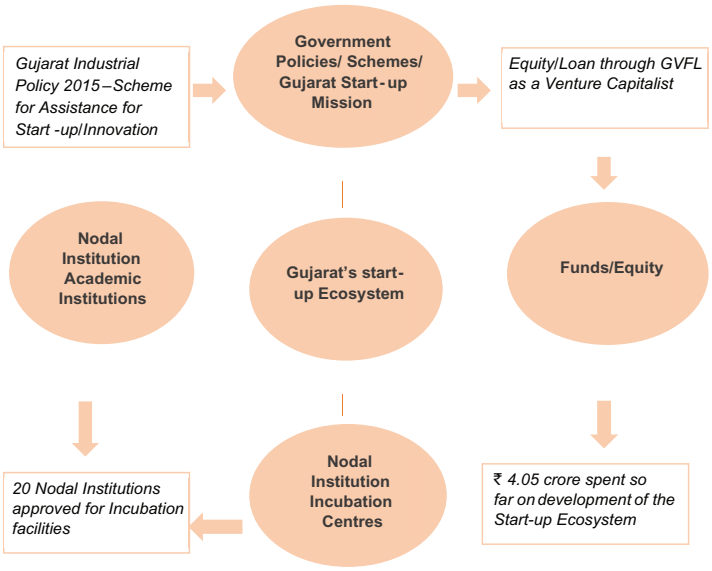
and a number of large, MSME industries, the state presents a unique human capital opportunity with its demographic dividend and a rising educated youth population. The state is host to premiere institutions like Indian Institute of Management (IIM), Indian Institute of Technology (IIT), National Institute of Design (NID) and EDII. There are more than 15 incubators to support start-ups, which have been primarily established in and around Ahmedabad by academic institutions such as Indian Institute of Management, Ahmedabad, Gujarat Technological University, MICA, NIRMA University, Ahmedabad University, Dhirubhai Ambani Institute of Information and Communication Technology (DA-IICT) and EDII. The state has more than 30 research institutions focusing on applied research in fields such as manufacturing, textiles, pharmaceuticals, biotechnology, petrochemicals and renewable energy. The state was ahead of many others in its proactive approach for boosting entrepreneurial activities and was among the pioneers for taking up initiatives in entrepreneurship development in the country. The state envisages a position of dominance in the start-up landscape in the country and thus introduced the New Industrial Policy in 2015 to assist start-ups/innovation in the state. Primary mission of the industrial policy includes proactive support for innovation, start-ups and technology transfer. Under the scheme, the state government has created Nodal Institutions (NIs) to promote start-ups. Any incubator of an academic institute/university/ private body is eligible to register as a NI under the scheme. NIs are responsible for inviting proposals from start-ups, evaluating them and providing incubation as well as mentoring facilities.

As part of the student start-up support system, many institutes have incorporated Entrepreneurship in their curriculum. Gujarat Technological University offers specialisation in Technology Entrepreneurship, while EDII offers PGDM in Business Entrepreneurship. Industry Associations or Organisations like TiE, Confederation of Indian Industry (CII), Gujarat Chamber of Commerce, Federation of Indian Chambers of Commerce and Industry (FICCI), National Association of Software and Services Companies (NASSCOM) and others encourage entrepreneurship. The presence of ITIs in each district is abundant proof of technology orientation of the Gujarat government.

The Gujarat Government has launched its first IT and Electronics Start-up Policy, with special focus on encouraging start-ups by providing a slew of incentives and subsidies.

To add momentum to the growth of start-ups, the Government of Gujarat has introduced the Electronics and IT/ITeS Start-up Policy 2016. While the New Industrial Policy aims at the manufacturing sector, this Policy is focused on promoting technology-based start-ups. The Gujarat government is looking to facilitate at least 2,000 start-ups, in the fields of electronics, Information Technology (IT) and nanotechnology, which have availed a minimum round of Venture Capital (VC) funding. Gujarat government also aims to establish at least 100 incubators in Gujarat, develop two million sq. ft. of 'incubation space' and facilitate investment (VC funding) of $1 billion to start-ups in the next five years. Several incentives for incubators and start-ups were announced through this policy.

Figure 2.2: The Start-up Ecosystem in Gujarat



Source: Gujarat State Start-up Initiative, published in July 2016

Table-2.1: Assistance offered under New Industrial Policy 2015

Quantum of Assistance	Assistance at the time of Commercialization of Idea
➢ Nodal Institutions provide mentoring service and allow the use of facilities available at institutions. ➢ Marketing/ publicity assistance up to ₹10 lakh for the introduction of innovated products. ➢ ₹10,000 per month to the innovator as sustenance allowance for one year. ➢ Venture Capital fund will be provided through Gujarat Venture Finance Limited (GVFL). ➢ Annual assistance of ₹5 lakh to NIs for mentoring services.	➢ Net VAT reimbursement up to 80% of Net VAT paid for five years up to 70% of fixed capital investment. ➢ Assistance of up to ₹10 lakh for product development. ➢ Reimbursement up to one-fifth of the eligible limit in a particular year. ➢ Free access to University Libraries, Government Laboratories, Centres of Excellence. ➢ Other benefits as per MSME schemes.

Source: New Industrial Policy 2015, published by the Department of Industries, Government of Gujarat

Table-2.2: Incentives under the IT/ITeS Start-up Policy

Incentives for Incubators	Incentives for Start-ups
➢ Capital assistance up to 50% of gross fixed capital investment up to ₹50 lakh ➢ Annual mentoring assistance of ₹5 lakh. ➢ Operational assistance of 25% of funds mobilised by them from non-governmental sources, subject to a ceiling of ₹1 crore per annum. ➢ Assistance for procurement of Software at the rate of 50% of the software cost up to ₹1 crore. ➢ 100% reimbursement of Stamp Duty and Registration Fee paid on sale/lease/transfer of land and office space for the first transaction ➢ Incentive on Power Tariff and Electricity Duty	➢ Monthly lease rental reimbursement at the rate of ₹15 per sq ft for two years. ➢ Interest subsidy at 9% per annum subject to a ceiling of ₹2 lakh per year for 2 years. ➢ Additional support of 25% of equity capital raisd without scrutiny up to ₹5 crores. ➢ 100% reimbursement of Stamp Duty and Registration Fee ➢ Reimbursement for the cost of patents up to ₹2 lakh per patent. ➢ Skill certification grant, marketing assistance and subsidy on bandwidth charges

Source: https://dst.gujarat.gov.in/images/pdf/Start-up-Policy-2016-21.pdf

2.3.2 Entrepreneurship and Start-up Scenario in Madhya Pradesh and Chhattisgarh

Brief Profile of the States:

The state of Madhya Pradesh was formed on November 1, 1956 by merging the then states of Madhya Bharat, Vindhya Pradesh and the princely state of Bhopal on the recommendation of State Reorganisation Committee. With the enactment of Madhya Pradesh Re-organisation Act in the year 2000, it was bifurcated to carve out a new state, Chhattisgarh. Before carving out Chhattisgarh, Madhya Pradesh was the largest state with abundant natural beauty, resources and economically useful minerals namely diamond (sole producer in the country), copper mining (80% in the country), magnesium ore, limestone, coal and coal-bed methane.

Madhya Pradesh, the second largest Indian state, is popularly known as the heart of India and is ninth in the state economies in the country. It is spread across an area of 3,08,000 sq. km (1,18,919 sq. miles). As per Census 2011, Madhya Pradesh has population of a 72.7 million literacy rate of with a 69%. The state is endowed with vast natural resources like forests, minerals, rare and valuable herbs and medicinal plants. The state is also rich in terms of water resources, with eight important rivers flowing across its landscape. MP is the largest producer of oilseeds and pulses, garlic and coriander in the country. Low cost of basic infrastructure and availability of skilled manpower, cheap unskilled labour further paved way for expanding the existing industrial base to a greater extent. Its rich cultural heritage and comparatively peaceful law and order situation, coupled with good connectivity with neighbouring states, has leveraged the state as one of the emerging economies with huge potential for growth.

Chhattisgarh (literally '36 Forts') is the 10th largest state in India, with an area of 1,35,194 sq. km (52,199 sq. miles). The 2011 Census report that the state had a population of 25.5 million and literacy rate of a around 70.3%. Chhattisgarh has a large reserve of mineral resources including iron, limestone and coal. It is a major source of electricity and

steel, accounting for 15% of the total production in the country.

The Business Environment in Madhya Pradesh and Chhattisgarh

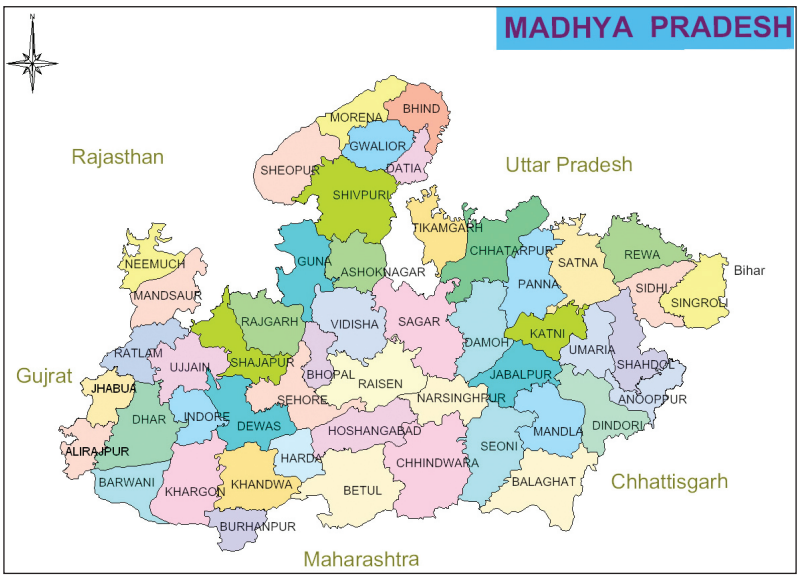
Madhya Pradesh has pursued a different path to accelerate economic growth. Between 2004-05 and 2015-16, its Gross State Domestic Product (GSDP) expanded at a Compound Annual Growth Rate (CAGR) of 11.84% to $86.32 billion, whereas the Net State Domestic Product (NSDP) expanded at a CAGR of 12.0% to $77.55 billion. According to the assessment conducted by DIPP, Madhya Pradesh has secured fifth rank in 2016. It has made significant reforms as suggested by DIPP's 340-Point Business Reform Action Plan. The turnaround in MP's economic performance is more broad-based, with agricultural GDP growing by 10% annually between 2005 and 2014, much higher than its historical annualised growth rate of 2.3% from 1995 to 2004. The power sector was reformed and grew at an approximate annual rate of 14% between 2008 and 2013. An investment of ₹20,000 crore (about $400 million) is being proposed by the National Thermal Power Corporation (NTPC) to build a generation capacity of about 4GW. Such changes substantively improved the investment climate in the state. MP also implemented a concerted thrust on tourism, awarding it 'industry' status that led to faster clearances of tourism-related investment projects. With reforms and rising incomes, demand-led sectors such as communication and financial services have also been growing rapidly.

Chhattisgarh is one of the fastest growing states in India. Between the years 2004-05 and 2015-16, Chhattisgarh's GSDP expanded at a CAGR of 11.83% to $36.6 billion. According to the assessment conducted by DIPP, it has secured fourth rank in 2015 on account of its significant reforms for promoting the business environment. The Chhattisgarh State Industrial Development Corporation (CSIDC) has set up industrial growth centres, five industrial parks and three integrated Infrastructure Development Centres (IIDC). The state also boasts of a notified SEZ in the Rajnandgaon District.

Entrepreneurship Development in Madhya Pradesh and Chhattisgarh

Madhya Pradesh has established itself as one of the favourable destinations for high-tech industries including heavy engineering, IT, Electronic System Design and Manufacturing (ESDM), telecommunications, automobiles along with other industries like textiles, pharmaceuticals, cement and agro & food processing based industries by setting up dedicated industrial clusters across geographical locations. This industrial growth has resulted in the demand for incubation, plug and play facilities for young, budding entrepreneurs within the state. Furthermore, the presence of prominent technical, management and other professional institutes such as IIT Indore, IIT Gwalior, IIM Indore, Maulana Azad National Institute of Technology (MANIT) Bhopal, Indian Institute of Information Technology (IIIT), Indian Institute of Information Technology, Design and Manufacturing (IIITDM)

Figure 2.3: District maps of Madhya Pradesh and Chhattisgarh



Jabalpur, Indian Institute of Science Education and Research (IISER) Bhopal and National Institute of Fashion Technology (NIFT) Bhopal, along with over 224 engineering colleges, 114 Polytechnics, 415 ITIs, 135 Skill Development Centres (SDCs) and other vocational training centres makes Madhya Pradesh an ideal destination for entrepreneurs, start-ups and technology transfer. Madhya Pradesh has designed clusters in Indore, Bhopal, Jabalpur, Gwalior, Reva and Sagar in the fields of pharmaceuticals, textile, food processing, IT, auto-components, engineering, fabrication, biotechnology, herbal products, garment, minerals, forest and herbal based industries, electronics, fast moving consumer goods and commodities, light engineering, refractories, limestone and forest based industries and major and minor minerals processing.

Chhattisgarh has an excellent educational ecosystem with the presence of IIM, IIIT, NIT, AIIMS, National Law University, an IIT and a Centre of Excellence by Siemens. The state has recently launched the Innovation and Entrepreneurship Policy for creating an enabling environment for entrepreneurship development. The policy can prove to be a catalyst for nurturing start-ups. The policy will offer major tax relief to the first 36 start-ups in the state. It also announced that start-ups would get a subsidy of 75% on term loans up to ₹70 lakh for six years, fixed capital subsidy of 35-40% up to ₹3.5 crore, electricity duty exemption for 10 years, stamp duty exemption on land purchase or lease, besides assistance in preparing project report, quality certifications, and technical patent costs.

MSME start-ups shall be eligible for 60% subsidy on land premium in state-run Industrial Parks. The units shall be given the facility to self-certify for various state laws.

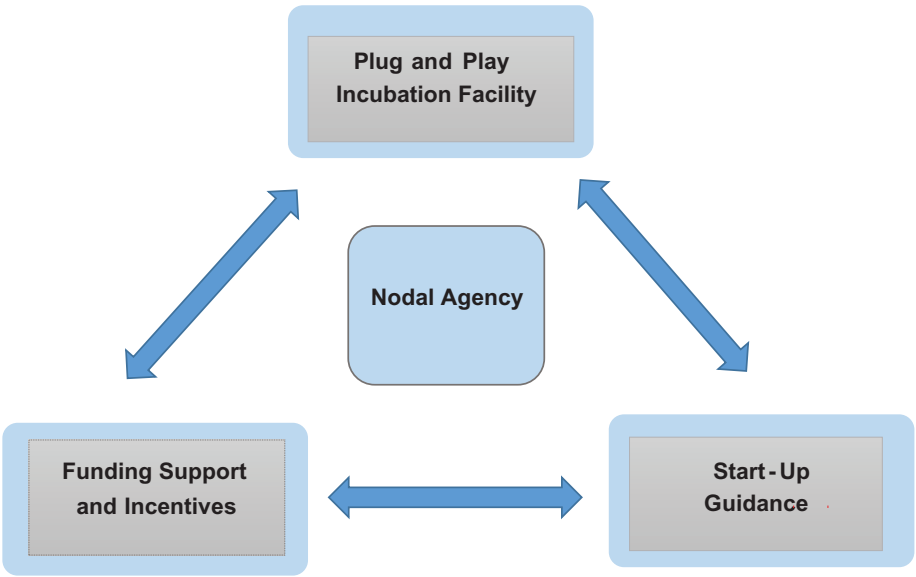
The objectives of the policy are as follows.

a) Establish Accelerators/ TBI in the state
b) Atleast a 100 ventures to be set up.
c) Start-ups incubated in the state to have funding raised from Venture Capitalists, financial institutes and Angel Investors
d) Conduct start-up Boot Camps in academia, covering all schools and universities
e) Large innovative companies to link with the state and thus establish start-up infrastructure such as Accelerators, Incubators, Research and Development spaces
f) To be recognised as one of the top hubs of innovation and entrepreneurship in Asia and the World
g) Promote gender equality by encouraging women in entrepreneurship
h) Enable the citizens of the state to be associated directly or indirectly with the start-ups to achieve a higher quality of life

The Start-up Ecosystem in Madhya Pradesh:

Madhya Pradesh has over 500+ start-ups, with a majority of them situated in Bhopal and Indore, and working in IT, services categories followed by e-commerce. The Madhya Pradesh government had earlier collaborated with SIDBI to set up a VC fund of over ₹200 crore, with ₹75 crore being provided by the government. The state government has also launched its Incubation and Start-up Policy 2016 to promote a sustainable start-up ecosystem in the state. The policy has three focus areas, highlighted in the figure below:

Figure 5: Focus areas of MP Incubation and Start-up Policy 2016



Source: MP Incubation and Start-up Policy 2016

The Policy aims to build a robust incubator network across academic institutions and to create a network of venture capitalists, and angel investors. The policy has declared lucrative incentives for both incubators and start-ups

Table-2.3: Incentives under the MP Incubation and Start-up Policy 2016

Incentives for Incubators	Incentives for Start-ups
➢ Capital assistance up to 50% of gross fixed capital investment up to ₹50 lakh ➢ Capacity expansion support for existing incubators for two years ➢ Mentoring assistance of ₹2 lakh for a period of three years ➢ Operational assistance to the tune of 50% of actual expense to the limit of ₹5 lakh per year ➢ 100% reimbursement of Stamp Duty and Registration Fee	➢ Reimbursement of 25% of lease rental subsidy to start-ups for a period of three years subject to the ceiling of ₹4 lakh per annum ➢ Interest subsidy at 8% per annum subject to an annual ceiling of ₹4 lakh for three years ➢ Marketing assistance of maximum ₹10 lakh to eligible start-ups for their product/service launch in the market upon securing minimum funding of 25% from a registered angel/ venture funds/reputed incubators by the start-ups ➢ Cost reimbursement for maximum three patents to a limit of ₹2 lakh for domestic and ₹5 lakh for international patents ➢ Credential development assistance

Source: MP Incubation and Start-up Policy 2016

2.3.3 Entrepreneurship and Start-up Scenario in Jammu & Kashmir

Jammu & Kashmir – State Profile

The lovely state of Jammu & Kashmir is perched among the snow-laden Himalayas. The state comprises three regions - Kashmir, Jammu and Ladakh. It is further divided into 22 districts: two in Ladakh, 10 each in Jammu & Kashmir. The total geographical area of the state is 2,22,236 sq. km. According to Census 2011, the population of the state is stood at 12.5 million and the literacy rate was about 67%. It enjoys special status on account of applicability of Article 370 of the Indian Constitution. It has its own Constitution and various provisions of Acts. Laws and regulations enforced by the Government of India are applicable in the state only after the State Legislature ratifies them.

Figure-8 District Map of Jammu & Kashmir

Business Environment in Jammu & Kashmir

The economy is primarily service based and agro-oriented. Between 2004-05 and 2015-16, the GSDP of Jammu & Kashmir increased at a CAGR of 10.2% to $17.73 and the NSDP increased at a CAGR of 8.3% to $12.5 billion.

A vast natural resource base has enabled Jammu & Kashmir to develop land for cultivating major fruits. With varied agro-climatic conditions, the scope for horticulture is significantly high in the state. Food processing and agro-based industries (excluding conventional grinding and extraction units) thrive in the state. It has an ideal climate for floriculture and boasts of an enormous assortment of flora, and fauna. The state has Asia's largest tulip garden and is amongst the very few places in the world where saffron can be cultivated.

Jammu & Kashmir's handicrafts are famous all over the world and the traditional handicraft industry has emerged as a large one in the state. Due to its large employment base and export potential, the industry has been receiving priority attention from the government. The state is also famous for its small-scale and cottage industries such as carpet weaving, silk manufacturing, shawls, basketry, pottery, copper and silverware, papier-mâché and walnut wood.

Tourism industry is one of the major contributors to the state's economy. Besides its scenic beauty, the state is also a popular pilgrimage destination. World renowned tourist attractions include the Vaishno Devi shrine, Chashma Shahi springs, Shalimar Bagh, the Dal Lake, Gulmarg, Pahalgam, Sonamarg, Ladakh and Patnitop. The Ladakh festival in September and Sindhu Darshan in June are popular events celebrated annually.

The cement industry has a huge growth potential in the state due to a large reserve of limestone of approximately 3,500 million tonne.

Entrepreneurship Development in Jammu & Kashmir

Jammu & Kashmir State Industrial Development Corporation (J&K SIDCO) is the nodal agency for promotion and development of medium, large-scale industries in the state. Thrust areas identified by the state government include food processing and agro-based industries, auto ancillaries, precision engineering, computer hardware and electronics, mineral exploration, ecotourism, silk, handicrafts and leather goods.

The Jammu & Kashmir Industrial Policy 2015 unfolds the state's ambition to promote trade and commerce activities by leveraging the natural and human resources of the state. It aims to put forward the state as an attractive investment destination.

The state has 67% literacy rate and is a host to 11 universities, 70 degree colleges, 28,307 schools, 91 industrial training institutes, 34 Polytechnics and five medical colleges. It was planned to provide corporate training for 17,000 Jammu & Kashmir youth in 2014. Two central universities have been set up to boost the educational infrastructure in the state, one in Kashmir division and the other in Jammu division.

As on December 31, 2015, a total of 29,449 small-scale units were registered in the state with a total investment of ₹3609.82 crore and provided employment to 1,35,892 people.

The state of Jammu & Kashmir has focused its attention on creating facilities in emerging sectors such as renewable energy, IT, biotechnology, nanoscience and food processing. SIDCO and DIPP have extended the Special Incentive Package in the state. This includes 100% premium reimbursement under Central Comprehensive Insurance Subsidy Scheme to all units on expansion over the next five years.

Undoubtedly, entrepreneurship development is gaining momentum among all the states discussed in this chapter. However, each state has its unique advantages and limitations in terms of the existing entrepreneurial ecosystem, which comprises access to markets, availability of human capital, funding support and physical infrastructure, regulatory framework, quality of education and training, and prevailing culture. While Gujarat is popular for its entrepreneurial culture and supportive ecosystem for entrepreneurship, other states like Chhattisgarh and Madhya Pradesh are not far behind. These states are promoting entrepreneurship development on a large scale too. Taking cognisance of the importance of entrepreneurship development as a major driving force of socio-economic development, these states have promulgated their respective entrepreneurship and start-up policies for creating an enabling ecosystem. In the year 2015, Gujarat, Chhattisgarh and Madhya

Pradesh were among the top five states for ease of doing business in India. On the other hand, Jammu & Kashmir has a long road ahead as far as entrepreneurship development is concerned. However, reasons for the same can be attributed to multiple factors, predominantly geopolitical factors. However, during recent times, the state has made remarkable efforts to support entrepreneurship. The industrial policy of Jammu & Kashmir has charted paths to provide required momentum for entrepreneurship and promotion of MSMEs.

CHAPTER 3

CONCEPTUAL FRAMEWORK

3.1 About the Global Entrepreneurship Monitor Project

In the rapidly changing world, knowledge plays a vital role in understanding and predicting phenomenon desired for economic growth and development of the society. Schumpeter wrote in his famous book *'The Theory of Economic Development'* that economic development and entrepreneurship go hand in hand and emphasised upon the role played by entrepreneurs.

While many studies have recognised entrepreneurship as a key driving force of economic growth, social development and competitiveness of countries, there have been apprehensions about our understanding of entrepreneurship as a global phenomenon. There has been constant search for the interdependence between entrepreneurship and economic development across nations. Entrepreneurship research has also been criticised for empirical gaps. There is not much internationally comparable data available on entrepreneurial activity. And, the available data is usually not up-to-date, lacks uniformity or does not contain information on entrepreneurial qualities of the population. Moreover, no internationally comparable background information is available about the start-up process.

Global Entrepreneurship Monitor (GEM) Survey was conceived based on this scenario. The project started in 1997 as a collaborative initiative by Michael Hay of London Business School (LBS) and Bill Bygrave of Babson College, USA. The survey was intended for collection and analysis of harmonised data on the prevalence of nascent entrepreneurship and young enterprises across nations. It aims to generate, propagate knowledge on entrepreneurship across the globe by exploring the entrepreneurial behaviour and attitude of individuals, the national context and its effect on entrepreneurship.

The GEM Survey has become a beacon of entrepreneurship study across the globe. The study has been prominently quoted by other reputed international organizations including the World Bank, World Economic Forum, United Nations and Organization for Economic Cooperation and Development (OECD). The number of participant countries has increased and each follows a standardised method of conducting the survey as well as preparing the report.

GEM Survey 2015 marks the completion of 17 years. Sixty-two countries took part in the survey. For the survey, each country is considered to be the basic unit of analysis in GEM. Financial support for GEM was largely provided by individual national teams. Hence, the countries to be included in the project reflected the emergence of groups of researchers able to raise the required funds to participate in the project. The country names have been listed in Table 1.

Table-3.1: Economies participating in the GEM Survey 2015, grouped by geographic regions and economic development level

Geographical Regions	Factor-Driven	Efficiency-Driven	Innovation-Driven
Africa	Botswana Burkina Faso Cameroon Egypt Senegal Tunisia	Morocco South Africa	
Asia & Oceania	India Iran Philippines Vietnam	China Indonesia Kazakhstan Lebanon Malaysia Thailand Turkey	Australia Israel Japan Republic of Korea Taiwan

Geographical Regions	*Factor-Driven*	*Efficiency-Driven*	*Innovation-Driven*
Latin America & Caribbean		Argentina Barbados Brazil Chile Colombia Ecuador Guatemala Mexico Panama Peru Uruguay	Puerto Rico
Europe		Bulgaria Croatia Hungary Latvia Poland Romania Macedonia	Belgium Estonia Finland Germany Greece Ireland Italy Luxembourg Netherlands Norway Portugal Slovakia Slovenia Spain Sweden Switzerland UK
North America			Canada United States

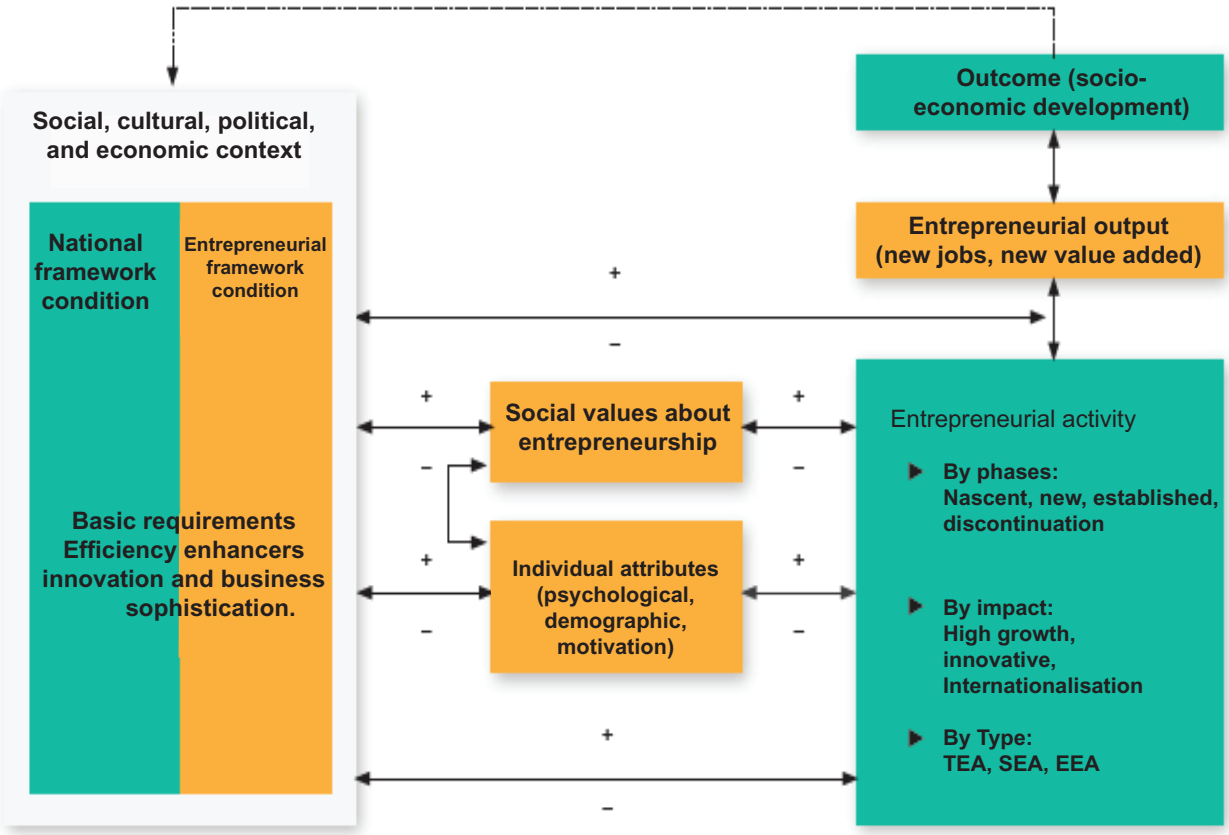
Source: GEM Global Report 2015-16

The objective of GEM Survey 2015 was to measure entrepreneurial activities across multiple phases of business process; characteristics, motivations and ambitions of entrepreneurs; attitude of societies towards this activity; and the quality of entrepreneurial ecosystem in different economies. The survey has classified 62 economies grouped by geographical regions and economic development adapted from the World Economic Forum's Global Competitiveness report. Based on the classification, the countries are categorised as factor-driven, efficiency-driven and innovation-driven.

3.2 The GEM Conceptual Framework

Over the years, the GEM conceptual framework has evolved gradually. It now offers more clarity to the assumed relations between social values, personal attributes and various forms of entrepreneurial activity. However, the basic assumption behind the conceptual framework has remain unchanged that entrepreneurial activity is not a heroic act of an individual, regardless of the environment in which the activity is performed. Entrepreneurial activity is an output of the interaction of an individual's perception of an opportunity and capacity (motivation and skills) to act upon this and the distinct conditions of the respective environment in which the individual is located.

Figure 3.1: The GEM Conceptual Framework



Source: GEM Global Report 2015-16

Any nation's level of entrepreneurial activity is the result of its population's assessment of entrepreneurial opportunities and entrepreneurial potentials (motivation and capacities). Recognition of opportunities and entrepreneurial potential are influenced by both specific entrepreneurial and general national framework conditions. While entrepreneurial framework conditions are also influenced by the general framework conditions within a nation, both of these framework conditions are shaped by social, cultural, political and economic factors. The national framework conditions reflect the phases of economic development (factor-driven, efficiency-driven and innovation-driven). The entrepreneurial framework conditions influence entrepreneurial activities more directly and consist of the following factors:

- Finance: The availability of financial resources, equity and debt for Small and Medium Enterprises (SMEs), including, grants and subsidies.
- Government policies: The extent to which taxes or regulations are either size-neutral or encourage SMEs.
- Government Entrepreneurship Programmes: The presence and quality of direct programmes to assist new and growing firms at all levels of government (national, regional and municipal).
- Entrepreneurial education and training: The extent to which training in creating or managing SMEs is incorporated within the education and training system at all levels (primary, secondary and post-school)
- Research and Development (R&D) transfer: The extent to which national research and development will lead to new commercial opportunities and is available to SMEs
- Commercial and legal infrastructure: The presence of property rights and commercial, accounting and other legal services, institutions that support or promote SMEs
- Entry regulation: It contains two components: (1) Market Dynamics: the level of change in markets from year to year, and (2) Market Openness: the extent

to which new firms are free to enter the existing markets.

- Physical infrastructure and services: Ease of access to physical resources such as, communication, utilities, transportation, and land or space, at a price that does not discriminate against SMEs
- Cultural and social norms: The extent to which social and cultural norms encourage or allow actions leading to new business methods or activities that can potentially increase personal wealth and income
- Senior entrepreneurship: The availability of policy interventions and social benefits for encouraging senior entrepreneurship.

3.3 Social Values towards Entrepreneurship

It includes how society values entrepreneurship as a good career choice, if entrepreneurs have a high social status, and how media attention to entrepreneurship is contributing (or not) to the development of a national entrepreneurial culture.

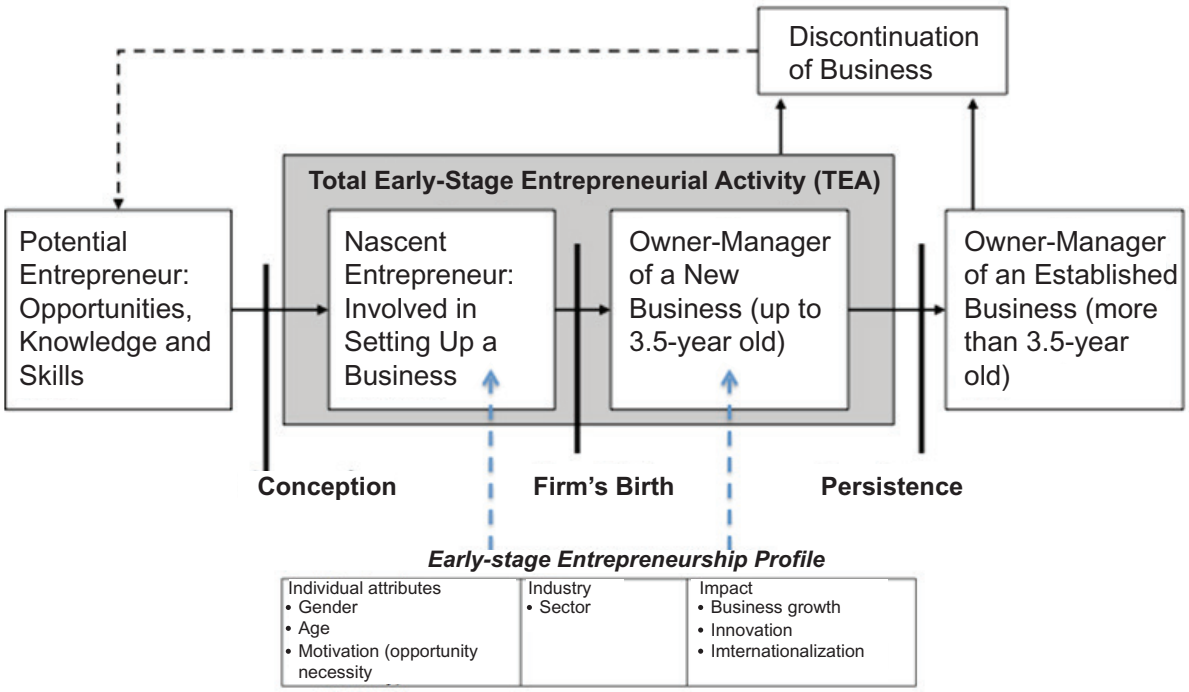
3.3.1 Individual Attributes

It includes several demographic factors (gender, age and geographic location), psychological factors (perceived capabilities, perceived opportunities and fear of failure) and motivational aspects (necessity-based vs. opportunity-based venturing, improvement-driven venturing and others).

3.3.2 Entrepreneurial Activity

Entrepreneurial activity is defined according to the ventures' life-cycle phases (nascent, new venture, established venture, discontinuation), types of activity (high growth, innovation, internationalisation) and sector of the activity (Total Early-Stage Entrepreneurial Activity – TEA, Social Entrepreneurial Activity – SEA, Employee Entrepreneurial Activity – EEA).

Figure 3.2 The Entrepreneurship Process



Source: GEM Global Report 2015-16

3.4 GEM Operational Definitions

- Total early-stage entrepreneurial activity (TEA): Percentage of individuals aged 18-64 who are either nascent entrepreneurs, or owner-managers of a new business.
- Nascent entrepreneurship rate: Percentage of individuals aged 18-64 who are currently a nascent entrepreneurs, actively involved in setting up a business they will own or co-own. This business has not paid salaries, wages or any other payments to the owners for more than three months.
- New business ownership rate: Percentage of individuals aged 18-64 who are currently are owner-managers of a new business, owning and managing a running business that has paid salaries, wages, or any other payments to the owners for more than three months, but not more than 42 months.

3.5 Characteristics of Early-stage Entrepreneurial Activity

- Opportunity-based early-stage entrepreneurial activity: Percentage of individuals involved in early-stage entrepreneurial activity (as defined above) who claim to be purely or partly driven by opportunity as opposed to finding no other option for work. This includes taking advantage of a business opportunity or being employed, but still seeking better opportunities.
- Necessity-based early-stage entrepreneurial activity: Percentage of individuals involved in early-stage entrepreneurial activity (as defined above) who claim to be driven by necessity (with no better choice for work) as opposed to opportunity.
- Improvement-driven opportunity early-stage entrepreneurial activity: Percentage of individuals involved in early-stage entrepreneurial activity (as defined above) who (1) claim to be driven by opportunity as opposed to finding no other option for work; and (2) who indicate that the main driving force for being involved in this opportunity is being independent or increasing their income, rather than just maintaining their income.
- High-growth expectation early-stage entrepreneurial activity (relative prevalence): Percentage of early-stage entrepreneurs (as defined above) who expect to employ at least 20 people five years from now.
- New product-market-oriented early-stage entrepreneurial activity (relative prevalence): Percentage of early-stage entrepreneurs (as defined above) who report that their product or service is new to at least some customers and not many businesses offer the same product or service.
- International-oriented early-stage entrepreneurial activity (relative prevalence): Percentage of early-stage entrepreneurs (as defined above) who report that at least 25% of their customers are from foreign countries.
- Established business ownership rate: Percentage of individuals aged 18–64 who are currently an owner-manager of an established business-owning and managing a running business that has paid salaries, wages, or any other payments to the owners for more than 42 months.
- Business discontinuation rate: Percentage of individuals aged 18-64 who in the past 12 months have discontinued a business, either by selling, shutting down or otherwise discontinuing an owner/management relationship with the business. It may be noted that it is NOT a measure of business failure rates.

3.6 Individual Attributes of a Potential Entrepreneur

- Perceived opportunities: Percentage of individuals aged 18-64 involved in any stage of entrepreneurial activity, excluding those who see good opportunities to start a business in the area where they live.
- Perceived capabilities: Percentage of individuals aged 18–64 involved in any stage of entrepreneurial activity, excluding those who believe they have the required skills and knowledge to start a business.
- Entrepreneurial intentions: Percentage of individuals aged 18–64 involved in any stage of entrepreneurial activity, excluding those who are latent entrepreneurs and intend to start a business within three years.
- Fear of failure rate: Percentage of individuals aged 18–64 involved in any stage of entrepreneurial activity, excluding those who report that fear of failure would prevent them from setting up a business.

3.7 The GEM Methodology

In the beginning with six participant countries, mostly from the G8 nations (Canada, Denmark, Finland, Germany, UK and USA), a global report was published in 1999 under the stewardship of Paul Reynolds. The purpose of GEM is to find empirically-based answers to the following questions-

1. Does the level of entrepreneurial activity vary between countries, and, if so, to what extent?
2. Does the level of entrepreneurial activity affect a country's rate of economic growth and prosperity?
3. What makes a country entrepreneurial?
4. What kind of policies may enhance the national level of entrepreneurial activity

To find the answer to these questions, GEM collects primary data from two main sources, namely Adult Population Survey (APS) of at least 2,000 randomly selected adults (18-64 years of age) in each country and National Expert Survey (NES) to collect opinions from experts.

3.7.1 Adult Population Survey (APS) in India

To investigate the level of entrepreneurial activity in the country, primary data was collected through APS. Stratified Random Sampling method was used to select cities or villages across the country for the survey. Further, a city/village was divided into four to five strata and selection of a certain number of survey starting points within each city/village was ensured. Moreover, with the help of the Kish Grid method, households and adults were identified for the survey. Rather than selecting the respondents directly from the population, the two-stage sampling method was used. Hence, after identification of the household, the eligible age-group was listed in the descending order by age and an eligible respondent was identified by next birthday method. If a selected person was not available at that time of initial visit, at least three more visits were made before moving on to another household. In all, 3,413 respondents (aged between 18 and 64 years) were included in the survey. More than 22 percent of the data was collected from each of four regions of India to ensure regional representation in the research.

Apart from regional representation, an effort was also made to ensure appropriate representation of gender and location-male/female and urban/rural, respectively. For this purpose, appropriate weightages were decided on the basis of various criteria.

Table- 3.2 Regional Distribution

Region	Number	Percentage (%)
West	815	23.9
South	847	24.8
East	784	23.0
North	967	28.3
Total	3,413	100.0

Source: Based on GEM India Survey 2015-16

Table 3.3: Rural/Urban Distribution

Location	Unweighted Sample	Percentage (%)	Weighted Sample	Percentage (%)
Urban	2,210	64.8	1,144	33.5
Rural	1,203	35.2	2,269	66.5
Total	3,413	100	3,413	100

Source: Based on GEM India Survey 2015-16

Table 3.4: Gender Distribution

Gender	Unweighted Sample	Percentage (%)	Weighted Sample	Percentage (%)
Male	1,739	51	1,745	51.1
Female	1,674	49	1,668	48.9
Total	3,413	100	3,413	100

Source: Based on GEM India Survey 2015-16

The data of Census 2011 was used for developing the weightage system for various indices such as male, female, urban and rural. While computation of the TEA index is a major outcome of this part of the study, it has also led to the identification of several characteristics of entrepreneurial individuals and firms. However, GEM India Report 2015 is mainly a description of the level and nature of entrepreneurial activity among adult population of the country and the quality of entrepreneurial framework conditions in the country. APS data is used to estimate the level of participation in entrepreneurial activities as well as to gather information on attitudes towards entrepreneurship and other related entrepreneurial activities.

3.7.3 National Experts Survey in India

The second source of GEM data is the NES, which conducts phone, email, or in-person interviews on the state of entrepreneurship in the country, with 72 national experts from public and private sectors. The interview was conducted with the help of a standardised questionnaire provided under the global GEM project. These experts were selected for their expertise based on the "entrepreneurial framework conditions" such as, government policy or transfer of R&D. The experts are equipped with rich perspectives not only about their respective profession, but also in entrepreneurial knowledge. The questionnaire presented a series of statements reflecting the GEM perspective on conditions supporting entrepreneurship. The experts were asked to estimate the degree to which each factor was applicable for India. The final section solicits open-ended responses which are coded into nine categories.

In all, 72 national experts were identified, approached and requested for data collection, and their consent was sought. Data was collected using e-mails and speed post, followed by face-to-face as well as telephonic interviews. The average age of experts was 40.9 years and the average work experience was 11.7 years. The profile of experts is given in Table 6 and contains multiple responses.

Table 3.5: Experts' Specialisation

S.No.	Specialization	Number	Percentage (%)
1	Entrepreneurs	31	41
2	Investors, financers, bankers	13	18
3	Policymakers	10	14
4	Business and support services' providers	28	39
5	Educators, teachers, researchers on entrepreneurship	38	53

Source: Based on GEM India 2015-16

Table 3.6 Experts' Profile

Particulars	Mean	Standard Deviation
Age	40.9	9.93
Experience	11.75	8.107

Source: Based on GEM India Survey 2015-16

CHAPTER 4

ENTREPRENEURSHIP ACTIVITY IN INDIA

GEM data of Adult Population Survey (APS) provides a rich understanding of entrepreneurship profiles of all 62 participating economies of the GEM community. As highlighted in the GEM conceptual framework, three components are vital for entrepreneurship activities. These are individual attributes (reflect perceptions about opportunities, capabilities to act entrepreneurially, entrepreneurial intention and fear of failure), social values (how entrepreneurial behaviour is valued by society) and entrepreneurship indicator (different forms of entrepreneurial activity and motivation for venturing).

4.1 Social Values towards Entrepreneurship

The attitude of societies towards entrepreneurship facilitates the tendency of individuals to become entrepreneurs. The evidence also suggests that positive attitude towards entrepreneurship correlates with high levels of entrepreneurship. The success of entrepreneurs is largely dependent on the entrepreneurial ecosystem of the society. Along with government policies, the value system and culture of society form the entrepreneurial ecosystem of the country. Thus it can be said that favourable attitude of the society towards entrepreneurship motivates individuals to start their own business. This assumption is also supported by Kwon and Arenius (2010). In the GEM Survey, social values are measured through the following three dimensions.

- If most people consider starting a new business as a desirable career choice;
- If those individuals who are successful at starting a new business, enjoy a high level of status and respect in the society; and
- If media attention to entrepreneurship (by promoting successful ventures) contribute (or not) to the development of entrepreneurial culture in the country.

Perceptions related to the above mentioned points have been demonstrated in Table 4.1.

Table 4.1 Perception of Social Values regarding Entrepreneurship in the BRICS Economies (% of population aged 18-64)

Countries	Entrepreneurship as a Good Career Choice	High Status to Successful Entrepreneurs	Media Attention to Entrepreneurship
Brazil	77.7	80.1	69.6
Russia*	NA	NA	NA
India	39.3	46.6	39.4
China	65.9	77.6	77.2
South Africa	73.8	76.1	72.2

Source: Based on GEM Global Report 2015-16

** Data was not available for Russia*

Table 4.2: Perceptions of Social Values regarding Entrepreneurship in Factor-driven Economies in 2015 (% of population aged 18-64)

Factor-driven Economies	Entrepreneurship as a Good Career Choice	High Status to Successful Entrepreneurs	Media Attention to Entrepreneurship
Botswana	70	82	76
Burkina Faso	74	83	67
Cameroon	61	65	65
Egypt	74	80	59
Tunisia	71	72	48
India	39	47	39
Iran	56	82	58
Philippines	75	76	82
Vietnam	73	76	74

Source: Based on GEM Global Report 2015-16

As demonstrated in Table 4.1, among the BRICS economies, Brazil has the highest social value towards entrepreneurship as a career. In India, adults are generally positive about entrepreneurship as a career option and entrepreneurs enjoy high self-esteem, status in the society. The survey found that 39% of Indian adults consider entrepreneurship as a desirable career choice; while 47% adults think that entrepreneurs enjoy high self-esteem, status in society and about 40% believe that there is enough media attention to entrepreneurship. Looking at the results, it is clear that India ranks comparatively lower than its peers, in both factor-driven as well as BRICS economies.

4.1.1 Gender and Social Values towards Entrepreneurship in India

To have a better understanding of the gender differences towards entrepreneurship, it is necessary to distinguish between the perceptions of gender. The survey found that a higher number of male respondents have positive attitude towards entrepreneurship in comparison to their female counterparts.

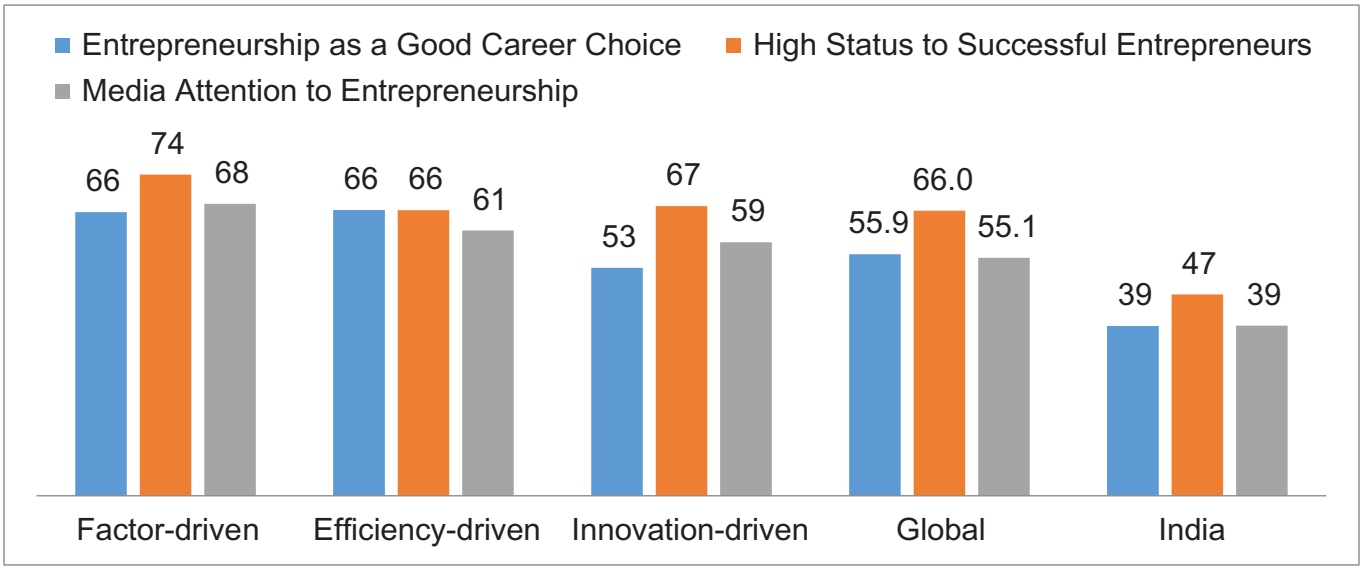
4.1.2 Regional comparison of Social Values towards Entrepreneurship

India's diversity is a boon and has a larger role to play in the entrepreneurship landscape. Hence, it is important to understand how these social values vary across different regions of India.

Figure 4.3 suggests that the western, southern and northern regions of India have a more positive attitude towards entrepreneurship compared to the eastern region. The survey results find that 48% population in the northern region perceived entrepreneurship as a good career choice, while 78% adult population in the southern region believes successful entrepreneurs are allocated high social status. However, entrepreneurial attitudes differ significantly in the eastern region. Eastern India possesses a relatively more conservative attitude towards entrepreneurship. It has been established that 28% population in eastern India consider entrepreneurship as a desirable career option in comparison to 44% in the west, 48% in the north and 39% in the south. Perceived media attention given to entrepreneurs is the lowest in eastern India - 21% in comparison to 57% in the south. Thus it signifies a relative regional disparity in the country.

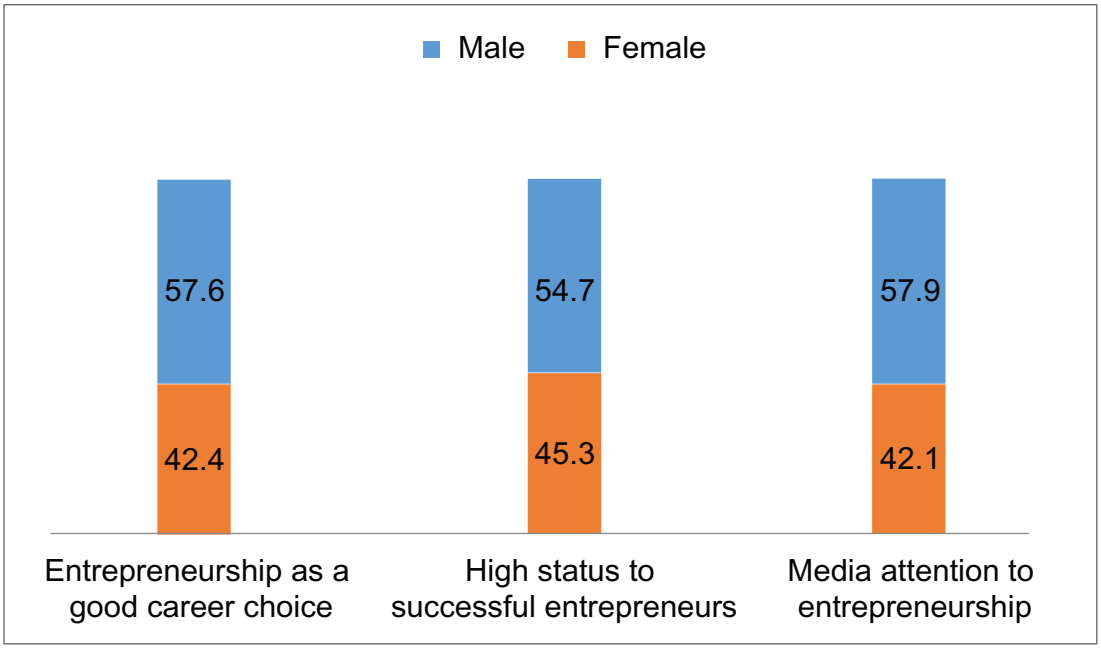
So far as the social values for states are concerned, Gujarat score high in the responses recorded on entrepreneurship as a preferred career, along with high status and respect associated with entrepreneurs in the society. Madhya Pradesh has the lowest score as far as entrepreneurship as a preferred career among the respondents is concerned. Figure 4.4 lists all the details.

Figure 4.1 Social Values towards Entrepreneurship - A multistage comparison (% of population aged 18-64)



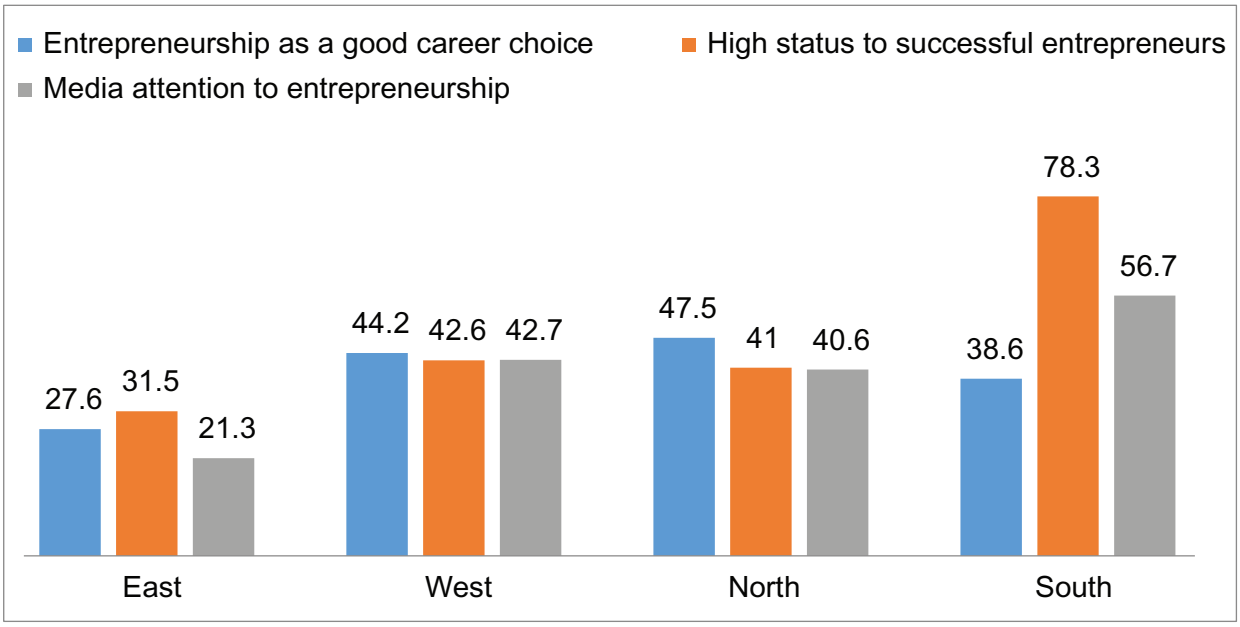
Source: Based on GEM Global Report 2015.

Figure 4.2 Gender-wise Social Values towards Entrepreneurship in India (% of population aged 18-64)



Source: Based on GEM Survey 2015-16

Figure 4.3: Regionwise Social Value towards Entrepreneurship in India (% of population aged 18-64)



Source: Based on GEM Survey 2015-16

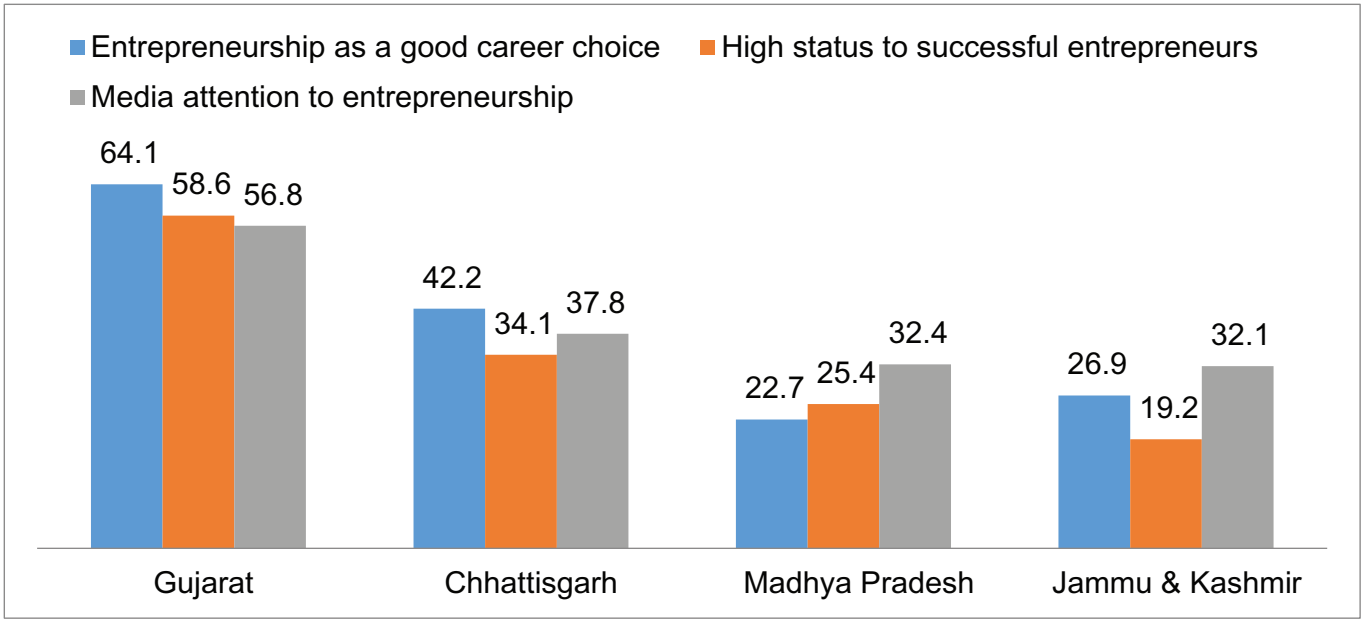
4.2 Individual Attributes

Individual attributes of an entrepreneur are crucial in terms of understanding entrepreneurship activities in a country. Individual attributes include the following: perception of opportunity, perception of own capabilities to act entrepreneurially, fear of failure and entrepreneurial intentions. Table 4.3 shows

how factor-driven economies differ in terms of individual attributes, whereas Figures 4.4 and 4.5 present the differences determined by the phases of economic development, as measured by APS, GEM 2015.

'Perceived opportunities' indicate the percentage of adults who believe there are fair chances to start a venture, in the next six months, in their immediate environment. 'Perceived capabilities' indicate the percentage of adults who believe they have the required skills, knowledge and experience to start a new venture. The measure of 'fear of failure' (when it comes to starting their own venture) only applies to those who perceive opportunities.

Figure 4.4 Selected state comparison of Social Values towards Entrepreneurship (% of population aged 18-64)



Source: Based on GEM Survey 2015-16

Table 4.3 Individual Attributes in Factor-driven Economies in 2015 (% of population aged 18-64)

Factor-driven Economies	Perceived Opportunities	Perceived Capabilities	Fear of Failure	Entrepreneurial Intentions
Botswana	58	74	19	62
Burkina Faso	58	78	18	46
Cameroon	61	73	24	33
Egypt	46	42	30	37
Senegal	70	89	16	67
Tunisia	49	60	40	29
India	38	38	44	9
Iran	40	62	38	35
Philippines	54	69	37	37
Vietnam	57	57	46	22

Source: Based on GEM Survey 2015-16

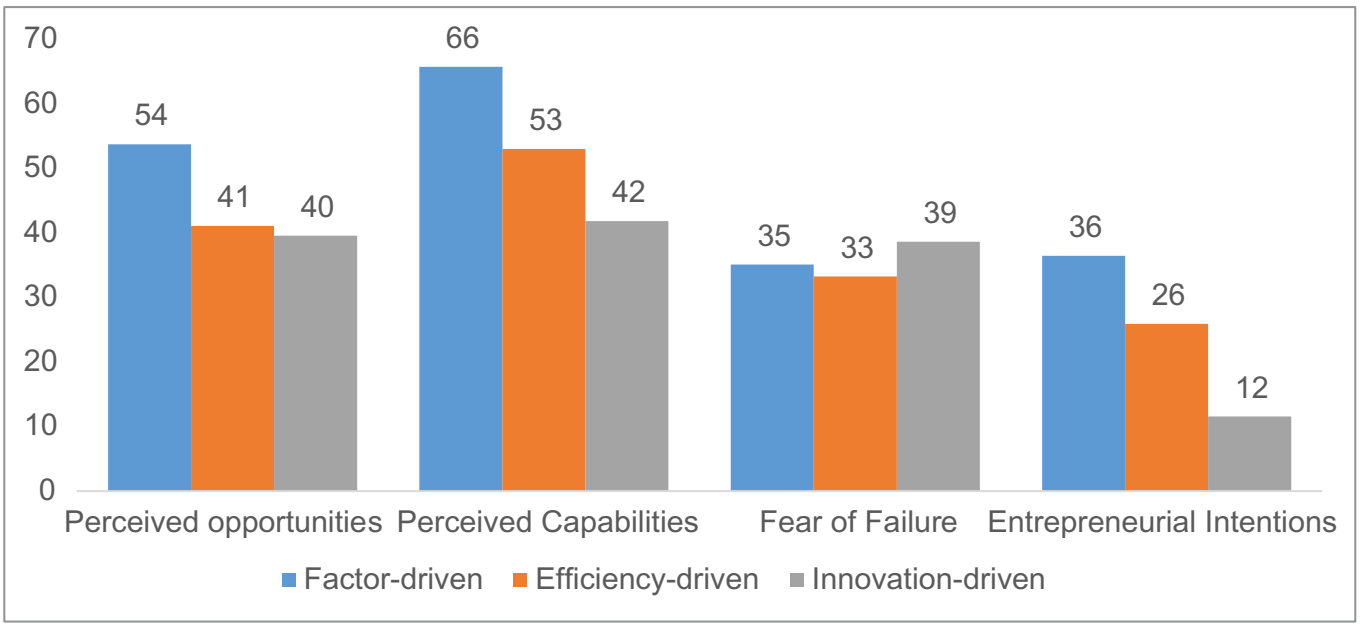
'Entrepreneurial intentions' are defined by the percentage of individuals who are expected to start a business within the next three years (those who are already entrepreneurially active are excluded from this measure). In order to compare individual attributes across the participating countries, a clear understanding of the context is very important - individuals in different economies are likely to have different kinds of businesses in mind when they express their perceptions about opportunities and their related measures on capabilities, fear of failure and entrepreneurial intentions.

The condition of entrepreneurship in any economy is inevitably constrained by the opportunities and threats, which are presented by a number of factors, including its environmental conditions. Therefore, it is important that entrepreneurs must react with the environment proactively in order to minimise the negative effects of their challenging business environments. Entrepreneurial attributes play a crucial role in taking such proactive approaches with the environment.

In fact, the emphasis on individual attributes is not new in entrepreneurship literature. Many scholars have found empirical evidence supporting the fact that individuals' attributes are primary determinants of their entrepreneurial undertakings. Douglas and Shepherd (2005) have defined Entrepreneurial Capital to include two dimensions: individual's entrepreneurial abilities and attitudes. Entrepreneurial attitudes are attitudes towards independence, risk, flexibility and others. Entrepreneurial abilities include opportunity recognition, sound judgement and innovative thinking. Such entrepreneurial capital is measured by an individual's belief and perception of self. Hence, subjective perceptions are important, as they often shape economic choices.

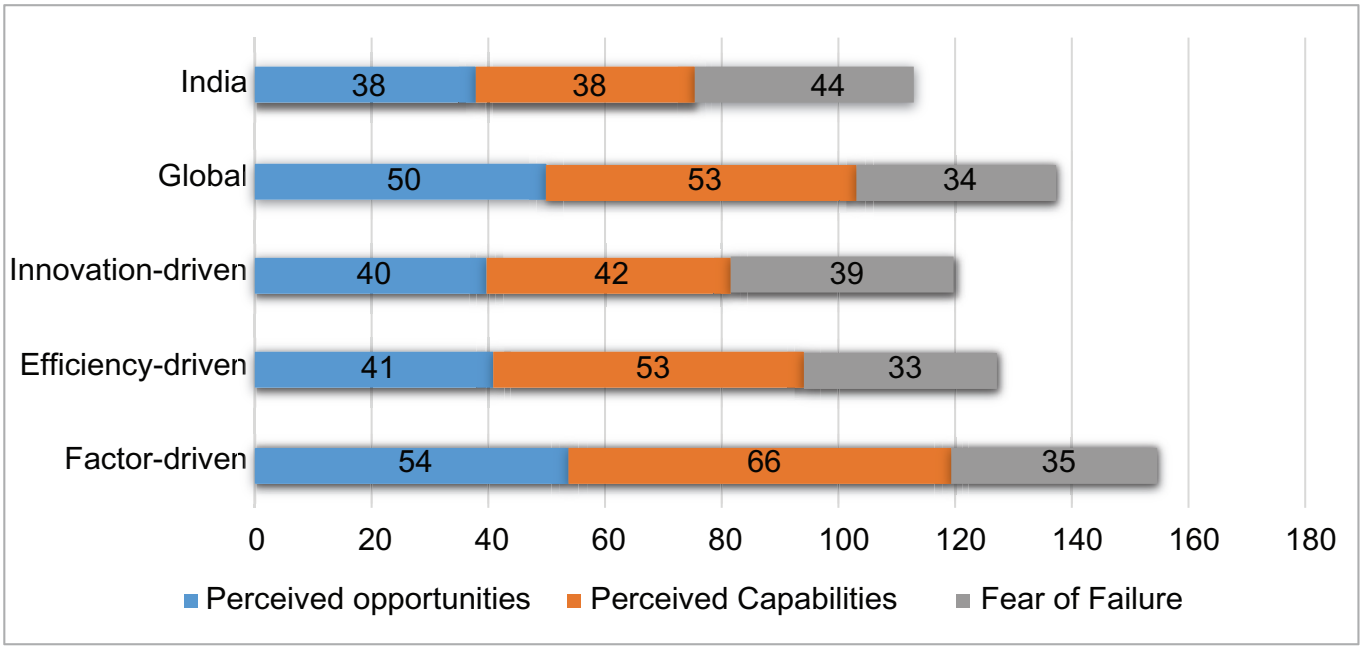
In general, perceived capabilities are higher than perceived opportunities, but they decline along the economic development level. In innovation-driven economies, both the perceived opportunities and capabilities are lower than in the efficiency-driven or factor-driven economies. The study finds in India, perceived capabilities are 38% vs. perceived opportunities at 38%. On the other hand; Iran, Philippines and Vietnam show a much higher perceived capability in comparison with the measure of perceived opportunity (62% vs.40%; 69% vs.54%; 42.4% vs.34.9%, respectively). Low levels of perceived opportunity in countries with economic development problems pose concern for the government, as well as several institutions.

Figure 4.5 Individual Attributes by the Phases of Economic Development (% of population aged 18-64)



Source: Based on GEM Global Report 2015-16

Figure 4.6 Individual Attributes in BRICS, Factor-driven and Global Economies 2015 (% of population aged 18-64)



Source: Based on GEM Global Report 2015-16

4.2.1 Individual Attributes in India

Entrepreneurship literature has highlighted most traits, personalities, orientations, motivations, structures, policies, mechanisms, processes and cultures that shape entrepreneurial practice. There is now a consensus that the process of opportunity identification is an important determinant for entrepreneurship (Shane and Venkataraman, 2000; Arenius and De Clercq, 2004). Several scholars like Baron, 2007; R. K. Mitchell *et al.*, 2007; Tang, Kacmar and Busenitz, 2012 also explain the importance of business opportunity identification process for entrepreneurial alertness. Hence, in order to set up a business, it is important for an individual to perceive some kind of opportunity. In the present research, it is measured by the percentage of people who claim that there are good conditions for starting a business in their neighbourhood within the next six months.

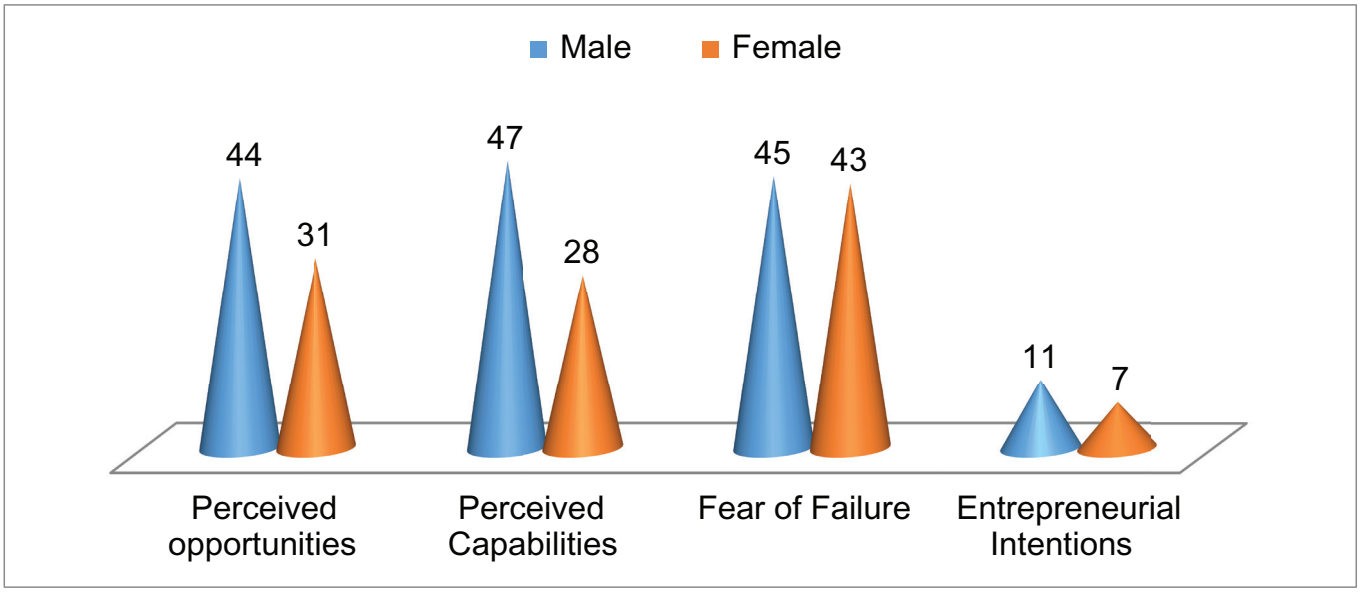
There is no consensus among researchers about the definition of entrepreneurial success. Scholars of entrepreneurship have defined it in various ways. Stefanovic *et al.* (2010) have pointed out many factors such as previous experience, hard work, access to capital, personal capabilities and leadership skills as factors affecting success.

Experience and knowledge have been identified by Hussain and Windsoperger, 2010 as success factors. Koellinger *et al.* (2005); Elam and Terjesen (2007); and Klyver *et al.* (2007) find evidence that belief in one's start-up skills is the most important predictor of being a nascent entrepreneur. Koellinger, 2008 proposed that individuals with a higher level of self-confidence are more likely to exploit innovative rather than imitative business opportunities. An important indicator of entrepreneurial intent is the individual's attitude towards risk. In spite of having an identified opportunity and despite positively perceived capabilities, fear of failure may deter the actual undertaking. In this way, entrepreneurial choices can be dominated by fear of failure. In the present research, the respondents were asked whether fear of failure would prevent them from starting a business.

Figure 4.7 demonstrates the gender difference related to individual attributes. A comparison between gender levels explains that women have, on average, lower perceptions about new business opportunities and their own capabilities. In case of fear of failure, women respondents reveal a lower rate than their male counterparts.

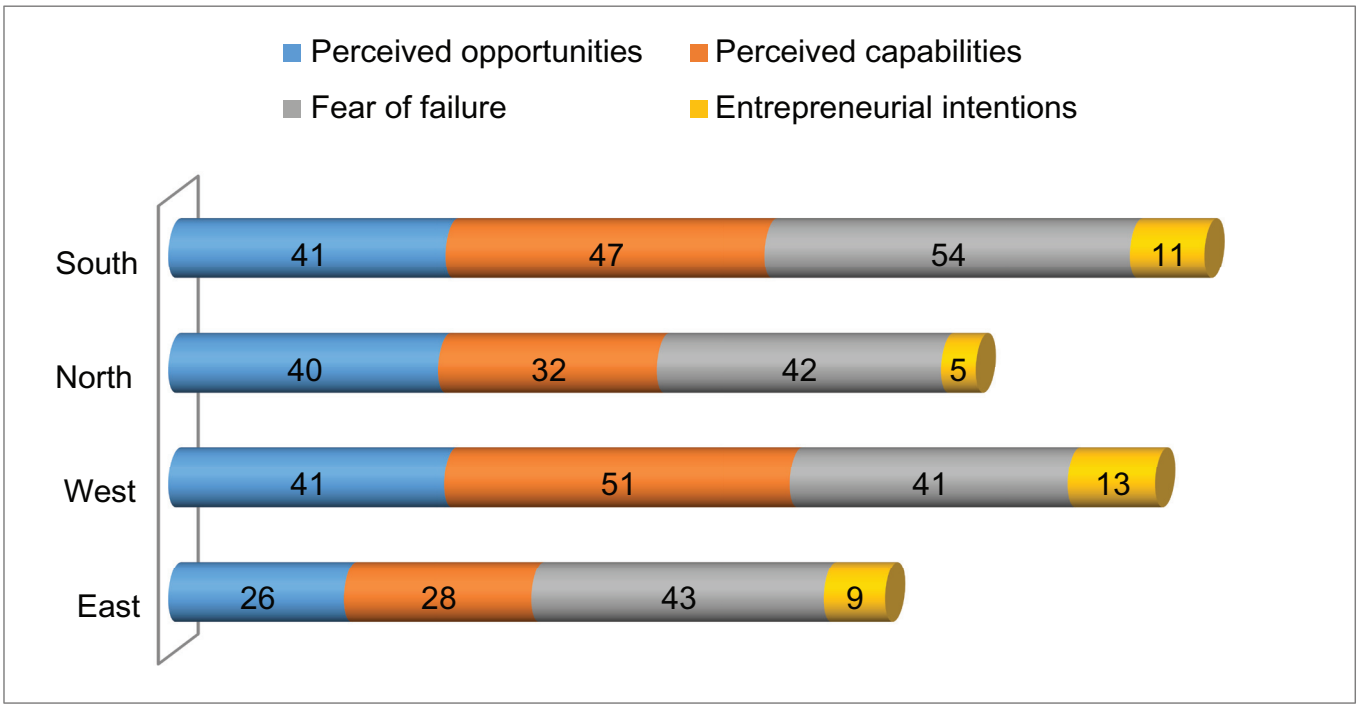
Reviewing the four regions, the eastern region has the lowest rate of perceived opportunity and capabilities as compared to other regions. However, the respondents from the southern region have the highest fear of failure rates as demonstrated by Figure 4.8.

Figure 4.7: Genderwise Individual Attributes in India (% of population aged 18-64)



Source: Based on GEM India Survey 2015-16

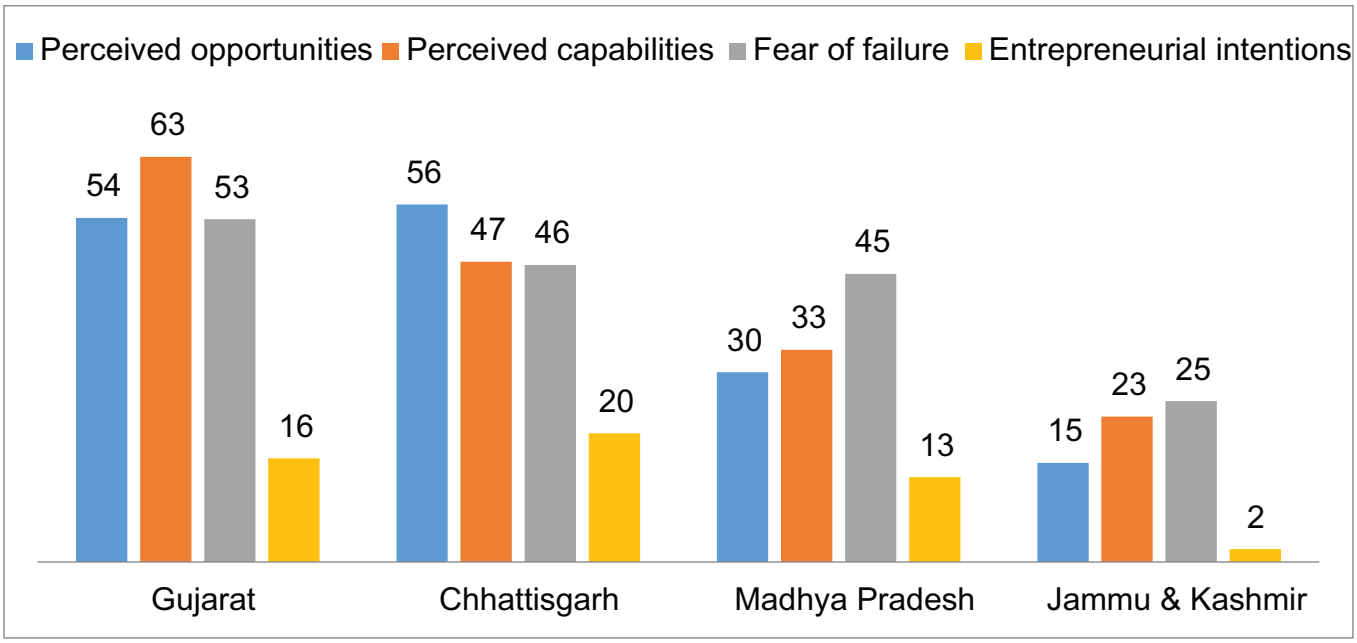
Figure 4.8: Regionwise Individual Attributes in India (% of population aged 18-64)



Source: Based on GEM India Survey 2015-16

Figure 4.9 shows that among the participant states for GEM India Study, Chhattisgarh has the highest rate of perceived opportunity (56%) and Gujarat has the highest rate of perceived capabilities (63%). The data reveals that Madhya Pradesh and Jammu & Kashmir have the lowest rates of perceived opportunity, perceived capabilities and fear of failure.

Figure 4.9: Individual Attributes among participating Indian States for GEM 2015 (% of population aged 18-64)

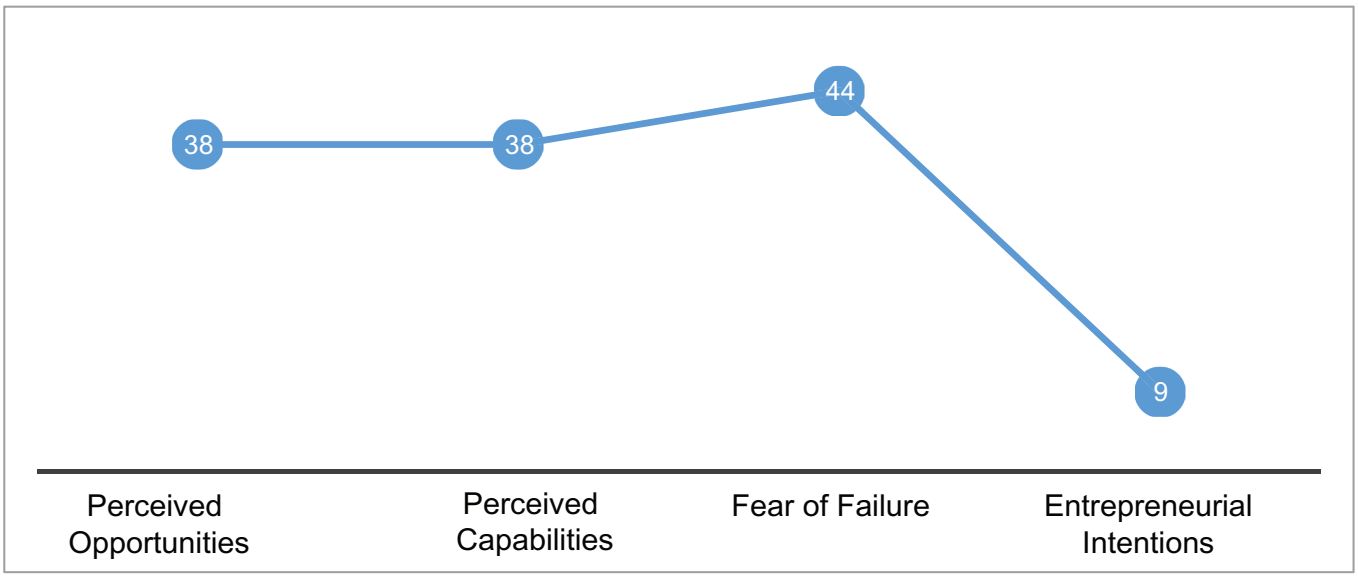


Source: Based on GEM India Survey 2015-16

4.2.2 Entrepreneurial Intentions in India

It is a fact that entrepreneurial activity is required everywhere, whether it stems from necessity or desire to seize all opportunities. Moreover, these entrepreneurial activities can take a wide variety of forms, from self-employment in less demanding ventures in terms of skills and other resources to knowledge-based ventures. The intention to start any business depends upon potential entrepreneurs' capabilities to see and act on opportunity, their self-confidence to start a business, and lack of fear of failure in business. A combination of all the three factors facilitates entrepreneurial intentions to start a business. The overlap of these three dimensions is shown to be 9% as illustrated in Figure 4.10.

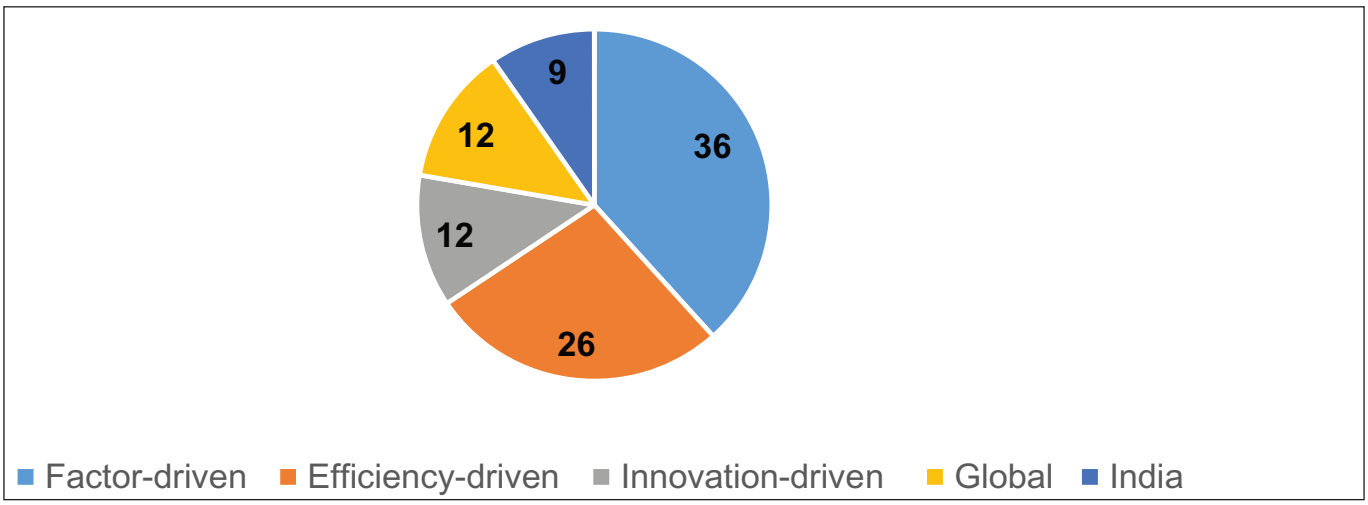
Figure 4.10: Entrepreneurial Intentions in India (% of population aged 18 - 64)



Source: Based on GEM India Survey 2015-16

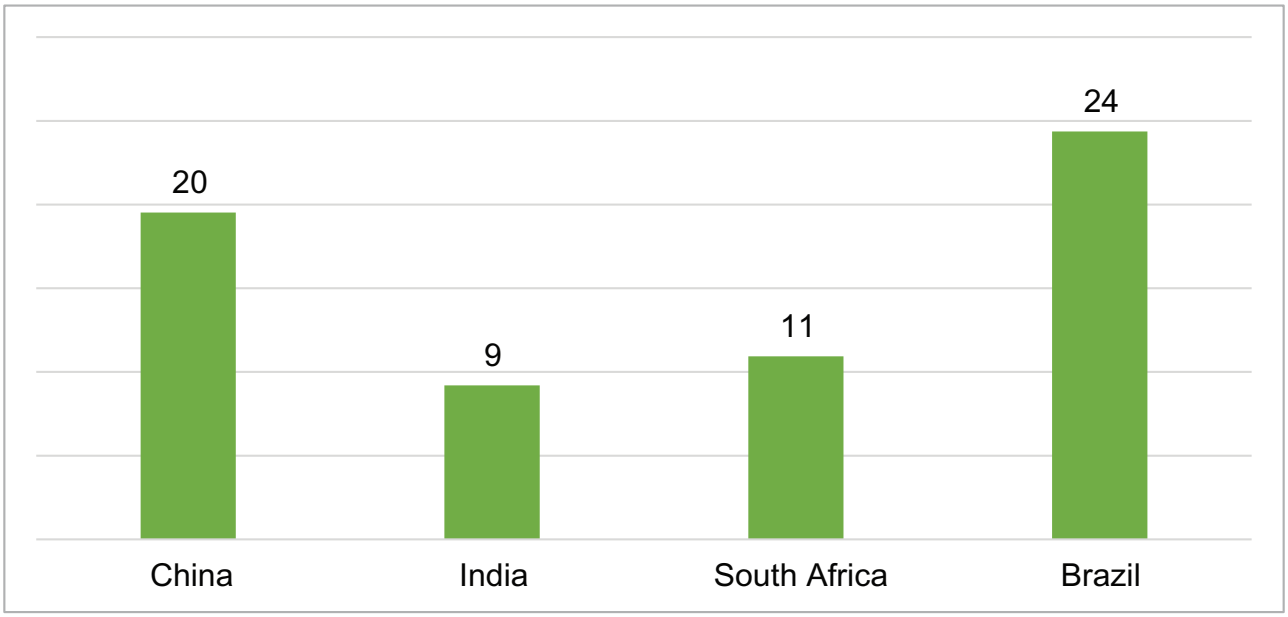
According to Krueger *et al.* (2000), entrepreneurial intention is the primary predictor of future entrepreneurial behaviour. They define entrepreneurial intention as a decision to form a new business venture that is planned rather than being conditioned. An individual may have the potential of being an entrepreneur because of own competency and self-efficacy, but may not make the transition into entrepreneurship because of the lack of intention. Grilo and Thurik, 2008 also opined that entrepreneurship is a long process comprising different engagement levels. In this regard, GEM's APS asks individuals about their intention to start a business within the next three years. Figure 4.10 summarises the findings, demonstrating that India's rate of entrepreneurial intention for 2015 is 9%. This is significantly lower than the average of factor-driven economies (36%). It is also evident that India has the lowest rate of entrepreneurial intention among the BRICS nations (Figure 4.12), except Russia, as the data for Russia was not available at the time of preparation of the Global Report 2015-16. The data for GEM 2015-16 also shows that India's rate of entrepreneurial intention is near the global average of 12%, which is a positive sign.

Figure 4.11: Entrepreneurial Intentions - A multistage comparison (% of population aged 18 - 64)



Source: Based on GEM Global Report 2015-16

Figure 4.12: Entrepreneurial Intention among BRICS Economies (except Russia) (% of population aged 18-64)

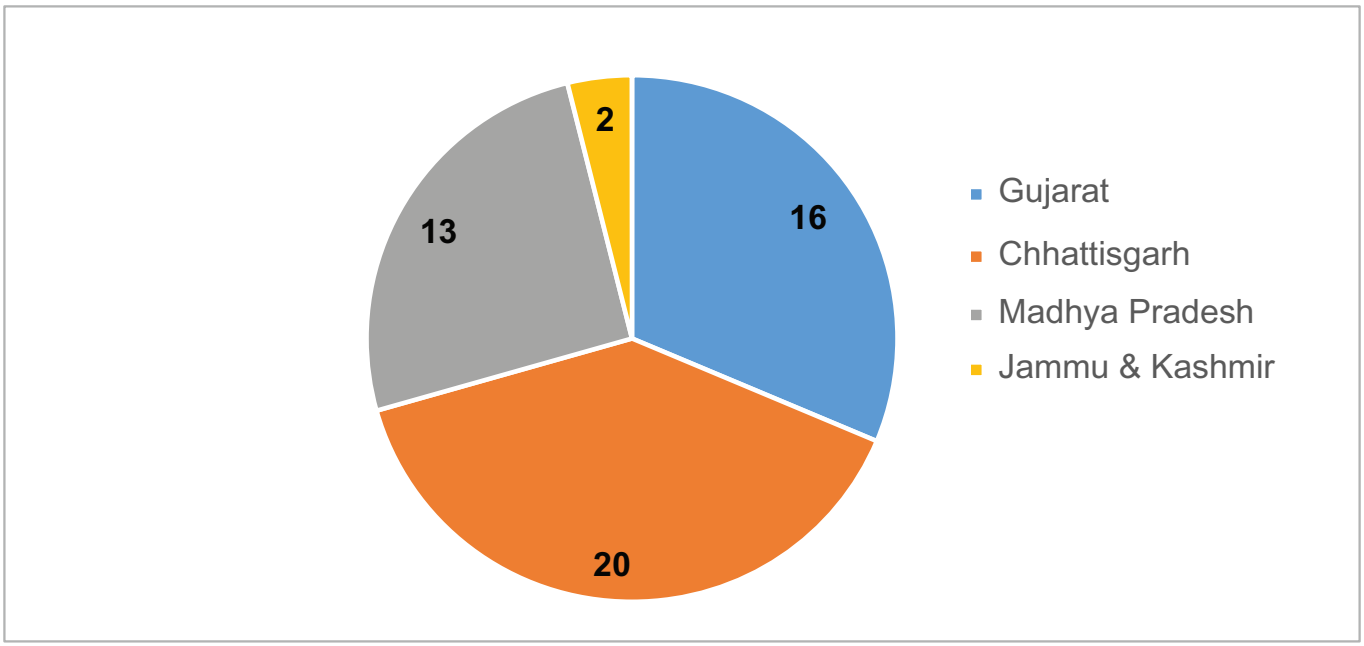


Source: Based on GEM Global Report 2015-16

Note-The data from Russia was not made available at the time of preparation of GEM Survey 2015-16

Among the states, Chhattisgarh has the highest entrepreneurial intentions (20%), followed by Gujarat (16%). Jammu & Kashmir has the lowest entrepreneurial intention (2%) as demonstrated in Figure 4.13.

Figure 4.13 Entrepreneurial Intention among states in India (% of population aged 18 - 64)



Source: Based on GEM India Survey 2015-16

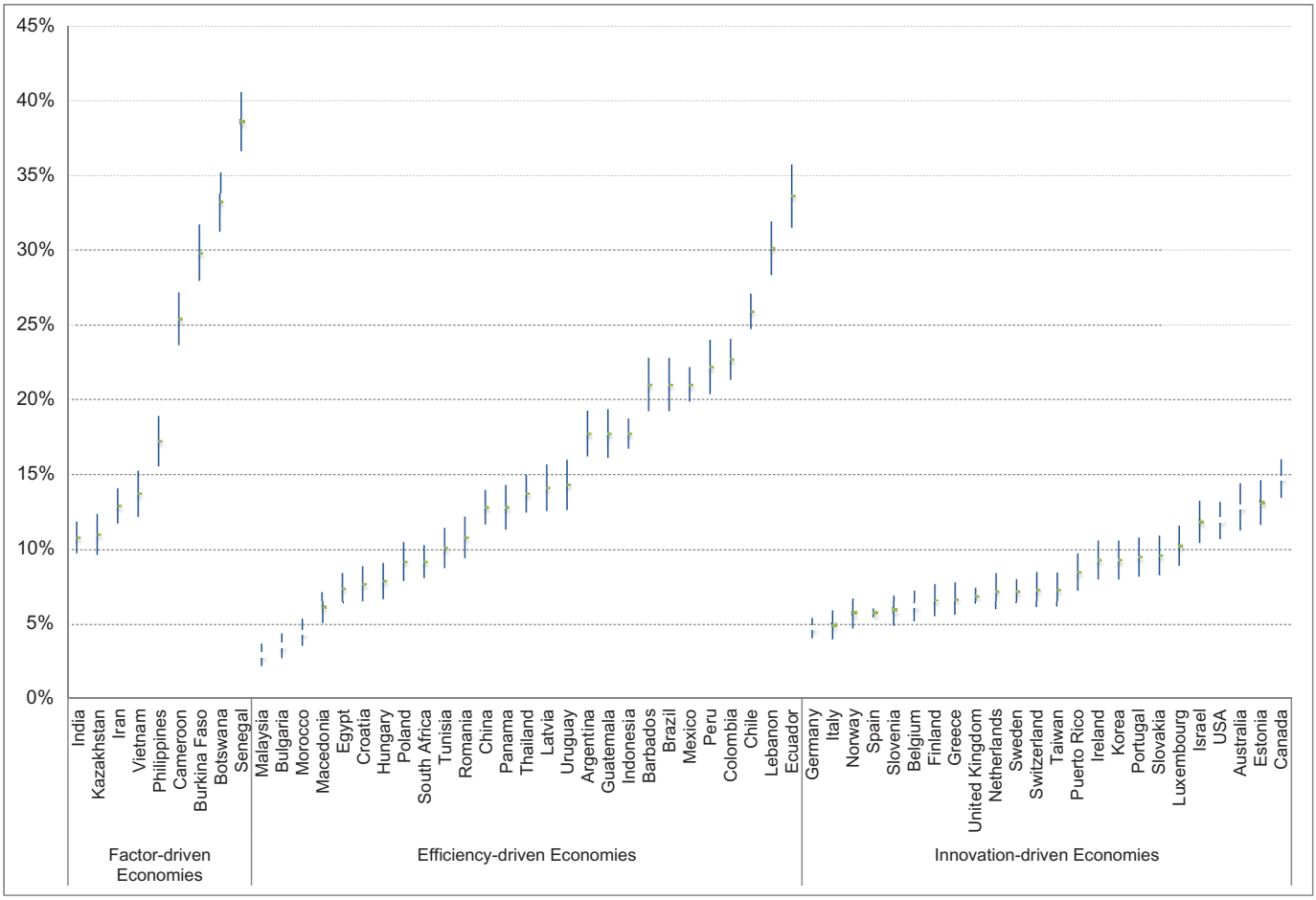
4.3 Total Early-Stage Entrepreneurial Activity

Total Early-Stage Entrepreneurial Activity (TEA) is the main theme of the present research. The concept of TEA consists of the percentage of individuals aged between 18 and 64 years who are in the process of either starting a new business or have recently started one. Thus, TEA has two dimensions: Nascent entrepreneurs — individuals who are taking steps to start a business; and New entrepreneurs — owner-managers of businesses less than three-and-a-half years in existence (baby businesses). It is important to mention here that the above mentioned measurement of entrepreneurship includes organisational life-cycle approach – nascent, new business, established business, and discontinuation. Hence, this report also discusses Established entrepreneurs - individuals who have been owner-managers of a business for more than three-and-a-half years. In this context, gender and age descriptors are used to emphasise some distinctive patterns. GEM data helps explain the variations in different countries' entrepreneurship rates, relative to the level of institutional development, demographic profile, especially age structure of the population, entrepreneurial culture and other developments in the country. Having presented an overview of entrepreneurial participation in India, this section also tries to sketch the entrepreneurial profile and illustrate socio-demographic characteristics to determine the effect of the entrepreneurial behaviour in the country.

4.3.1 Total Early-Stage Entrepreneurial Activity in GEM Countries

A series of researches have emphasised the significant contribution of entrepreneurship in economic growth and development (Schramm, 2004; Van Stel *et.al.* 2005; Baumol *et al.*, 2007; Gries and Naude, 2008; and Naude, 2008). In line with WEF's classification, GEM categorises the participating countries into factor-driven economies, efficiency- driven economies and innovation-driven economies. Figure 4.14 presents the data on entrepreneurial activity for all GEM countries in 2015. The countries are grouped by the stage of economic development, and basic characteristics of general entrepreneurial activity in each country are presented.

Figure 4.14 Total Early-Stage Entrepreneurial Activity (TEA) in the GEM Economies, grouped by Phases of Economic Development (% of population aged 18-64)



Source: Based on GEM Global Report 2015-16

Note: Vertical bars represent 95% confidence intervals for the point estimates of TEA.

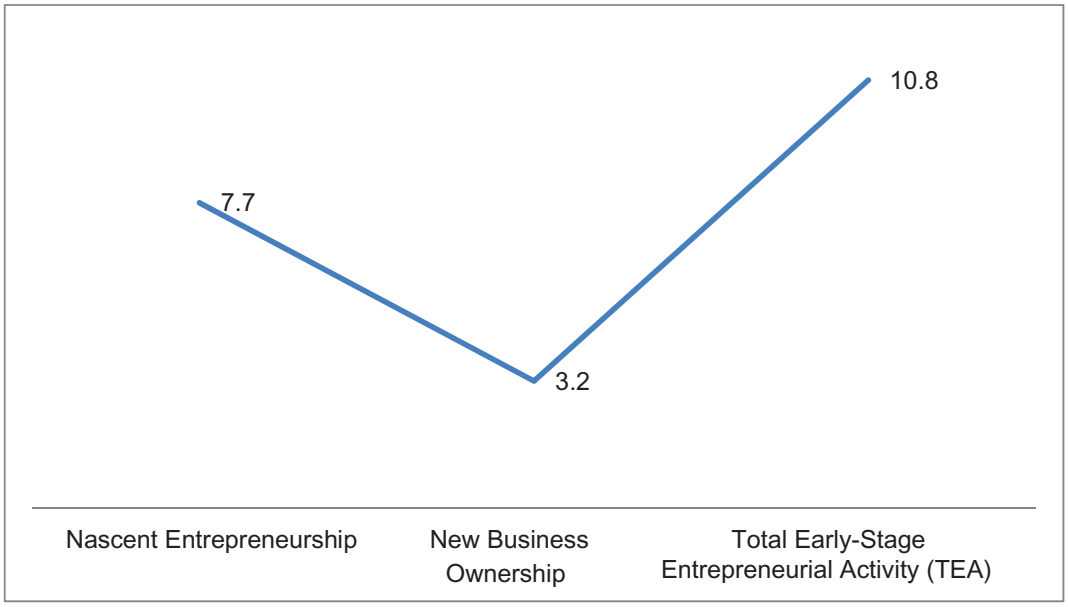
India is recognised as a factor-driven economy. The measurement of TEA includes nascent entrepreneurs and new entrepreneurs. Nascent entrepreneurs are those adults who are trying to start a new business, which they will own either fully or partially. The individual should have taken steps towards this start-up activity such as developing a business plan, having accessed financial credit or hiring employees. New entrepreneurs are those who currently own and have been managing a business for less than three-and-a-half years. It is important to mention here that an adult could be an owner-manager of a new business and concurrently be involved in start-up activities for the launch of a new business. Such an adult will be counted as one active person in the calculation of the TEA rates.

4.3.2 Total Early-Stage Entrepreneurial Activity in India

In India, 7.7% of the adult population comprises of new firm entrepreneurs and an additional 3.2% are nascent entrepreneurs who are actively trying to start a business. It means that 11% of the adult population is engaged in some aspect of TEA (Figure 4.15). However, India has the lowest TEA rate among the factor-driven economies, except Tunisia and Egypt with TEA of 10% and 7% respectively. Senegal has the highest TEA rate among the factor-driven economies.(Figure 4.14)

It is also evident from Table 4.4 that TEA is higher in a factor-driven economy whereas, Employee Entrepreneurial Activity (EEA) is lower. It suggests that a factor-driven economy needs special attention to promote EEA in the country. Though, TEA is lower in innovation-driven economy but the nature of entrepreneurial activities is more innovative than factor-driven economy.

Figure 4.15: Stage Entrepreneurial Activity in India (% of population aged 18-64)



Source: Based on GEM India Data 2015

Table 4.4 Stages of Entrepreneurial Activity- A comparison (% of population aged 18-64)

Stage of Economic Development	Total Early-Stage Entrepreneurial Activity (TEA)	Employee Entrepreneurial Activity (EEA)	Established Business Ownership Rate
Factor-driven	21	1	13
Efficiency-driven	15	2	8
Innovation-driven	8	5	7
India	10.8	0.3	5.5

Source: Based on GEM Global Report 2015-16

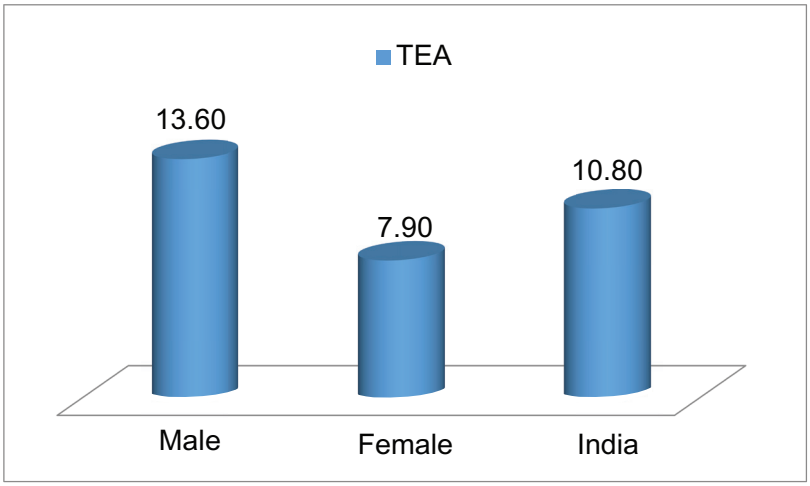
4.3.3 Total Entrepreneurial Activity, grouped by gender in India

Given the gender disparity, it is interesting to know how reasons for entrepreneurial activity vary between men and women. Figure 4.16 illustrates that in India, about one-third of early-stage entrepreneurs are women. GEM surveys (including GEM special reports on women) consistently confirm that early-stage entrepreneurial activity is gender sensitive, due to a combination of cultural, societal, and economic reasons. According to GEM, there are 126 million women operating new businesses and another 98 million at the helm of established ventures. Despite these figures, India faces a huge gender equality gap. The result indicates that entrepreneurial activities of Indian male and female differ significantly. The male−female ratio is more or less balanced in the sample.

This data showed that 14% of men and 8% of women are involved in early-stage entrepreneurship, the ratio of men to women is close to 2:1. Hence, the likelihood that an individual engages in early-stage entrepreneurial activity is influenced by gender. Indian men are twice more likely to be involved in early-stage entrepreneurship as compared to their female counterparts. This finding is supported by a number of research studies, which point out that men have higher probability of engaging in entrepreneurship (Blanchflower *et al.* 2001; Reynolds *et al.* 2002; Arenius and De Clercq 2005; Minniti *et al.* 2005; Davidsson 2006; Klyver *et al.* 2007; Grilo and Thurik 2008; and Klapper and Parker 2010).

Higher male TEA is a universally prevelant characteristic in almost all GEM countries. However, the gap between male and female TEA varies across nations depending on as well as reflecting their diverse social culture and norms.

Figure 4.16: Total Early-Stage Entrepreneurial Activity (TEA), grouped by Gender (% of population aged 18-64)



Source: Based on GEM India Survey 2015-16

4.3.4 Total Entrepreneurship Activity grouped by age groups in India

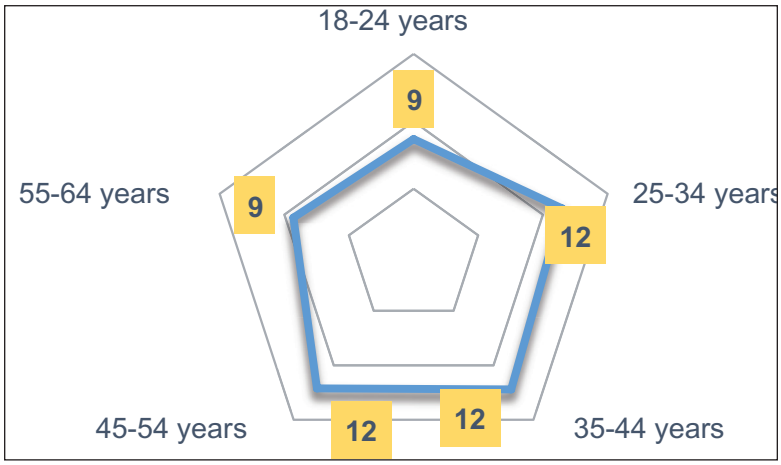
Figure 4.17 reveals that the probability of being an early-stage entrepreneur is the highest among individuals between three age groups: 25-34 years, 35-44 years and 45-54 years. The distribution of age groups within the TEA is in line with global trends, where the highest prevalence rate is found in the 18-44 age range. High TEA rates among the young age groups of 18-44 years is indicative of positivity for a country like India, which is undergoing a demographic transition, with an increase in the share of the working-age youth population.

4.3.5 Total Entrepreneurial Activity grouped by regions in India

India is a country of diverse culture and multiple religions. The involvement in early-stage entrepreneurship varies across regions due to their cultural differences. Hence, to gain better understanding of these regional differences, a regional comparison within the country is essential.

These diversities also determine the male-female entrepreneurship ratio to a large extent. It thus becomes important to compare TEA, grouped by gender across the four regions of India. The results presented in Figure 4.18 clearly reveal that northern India has a higher contribution in entrepreneurial activities whereas the contribution of eastern India is lowest among all four regions. The lowest relative rates of involvement in entrepreneurship can also be found in eastern India as shown in figure 4.19, where only 3% of the early stage entrepreneurs are women.

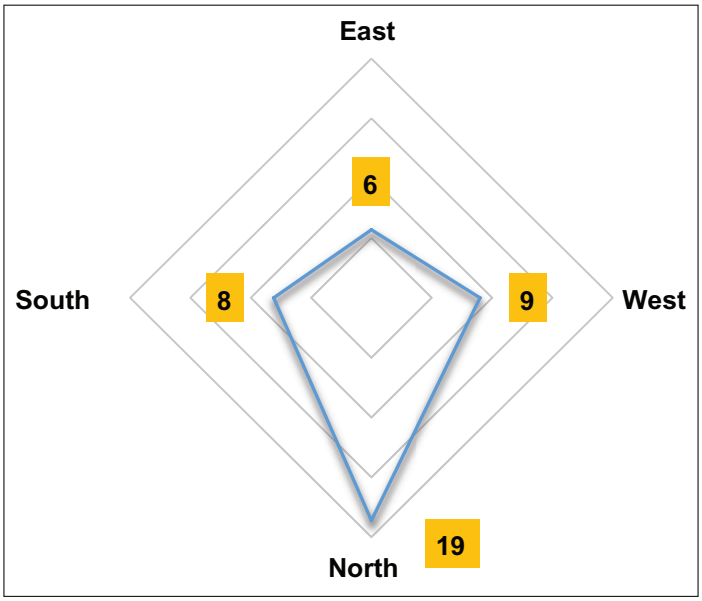
Figure 4.17 Total Early-Stage Entrepreneurial Activity (TEA), grouped by Age groups (% of population aged 18-64)



Source: Based on GEM Global Report 2015-16

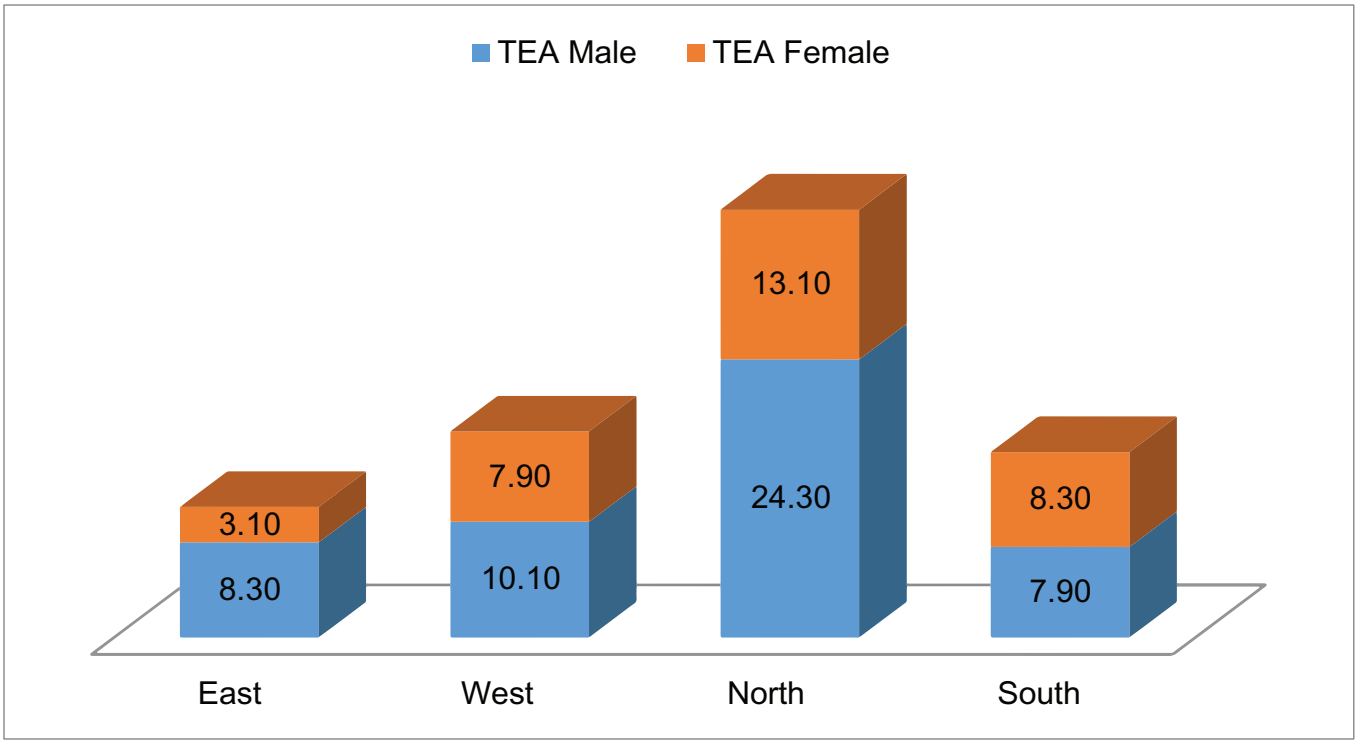
The difference in participation rates between men and women appear to be prominent in northern India. Southern India has shown improved female participation (8%) compared to only 4% in 2014. Western India also witnessed an improvement in female participation, thus indicating a more favourable environment for female entrepreneurs.

Figure 4.18 Total Early-Stage Entrepreneurial Activity (TEA), grouped by Region (% of population aged 18-64)



Source: Based on GEM India Survey 2015-16

Figure 4.19: Total Early-Stage Entrepreneurial Activity (TEA), grouped by Gender and Region (% of population aged 18-64)



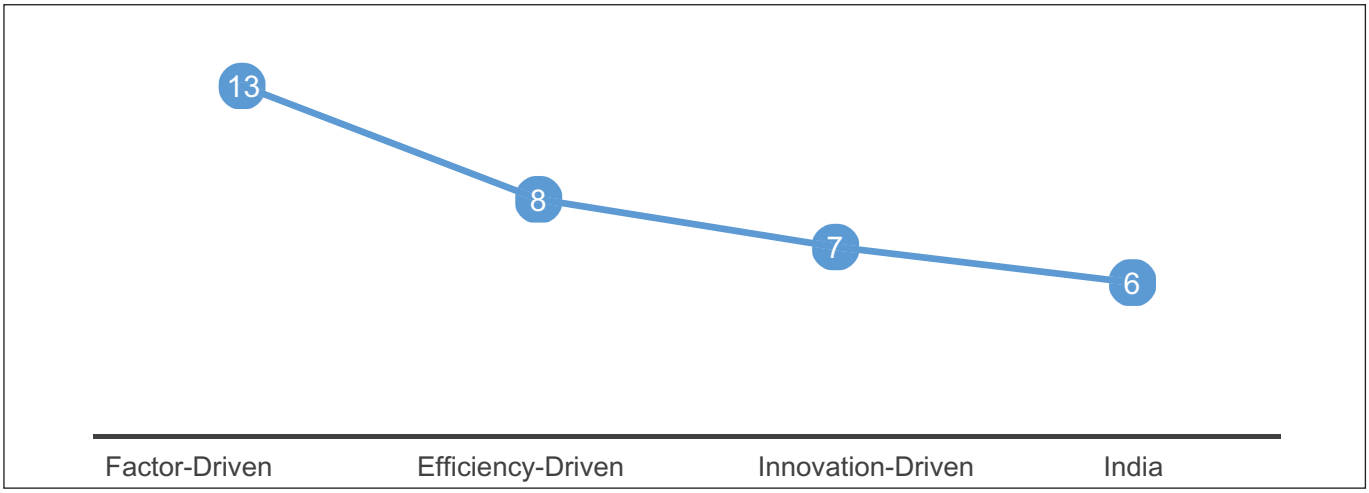
Source: Based on GEM India Survey 2015-16

4.3.6 Established Business Rate in India

In addition to the launch of a business, its survival, growth, and sustenance are also essential for development of the nation. The established business rate plays a significant role in stable job generation and value creation. GEM has been using two criteria to differentiate between 'young' and established businesses.

According to GEM methodology, the rate of established entrepreneurs refers to those who have owned and managed an enterprise for more than 42 months and have paid wages or salaries over the same time period. In fact, not all newly-created firms survive the initial critical years. The cut-off of 42 months for differentiating between new businesses and established firms has been made by combining theoretical and practical considerations (Reynolds *et al.*, 2005) and it has been consistently used from the very beginning of GEM Survey. The results presented in Figure 4.20 reveal that India's established business rate is 6%, the lowest among all types of economies. However, India has marginally improved its established business rate in comparison with last year (3.7%).

Figure 4.20 Established Business Rate in 2015 (% of population aged 18 - 64)



Source: Based on GEM Global Report 2015-16

4.3.7 Discontinued Business Rate in India

Discontinuation of business is generally viewed as an outcome of adverse situations, namely volatile market scenario, lack of funding support and others. It is evident that start-ups and launch of new businesses are dependent on the exit policy for businesses in the country. It may be possible that some form of discontinuation of business may help entrepreneurs in unlocking valuable resources and utilising them in more optimal allocations. Hence, discontinuation does not necessarily have negative impact on an entrepreneur.

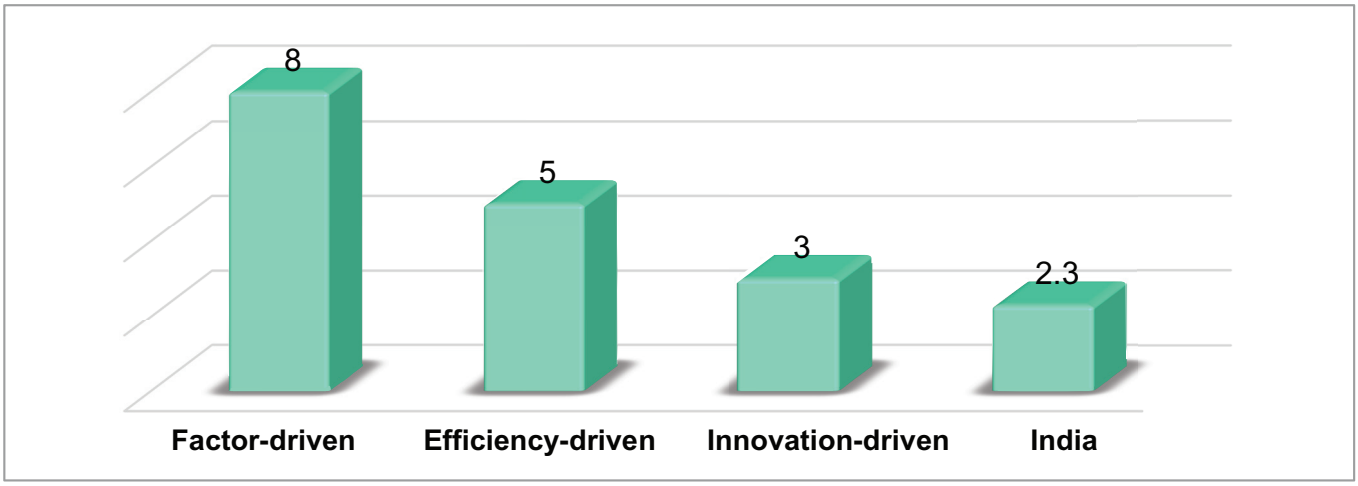
Therefore, it is extremely important to understand the reasons behind business discontinuity. GEM measures Discontinued Business Rate as the percentage of individuals aged 18-64 years who owned a business, but discontinued it for different reasons during the past 12 months. Figure 4.21 shows that in India, 2.3% adults reported discontinuation of their business in 2015, which is the lowest in comparison to all economies.

4.3.8 Reasons for Entrepreneurial Exits in India

The GEM Survey framed and asked one question to figure out important reasons for discontinuing a business. Figure 4.22 provides an overview of these reasons.

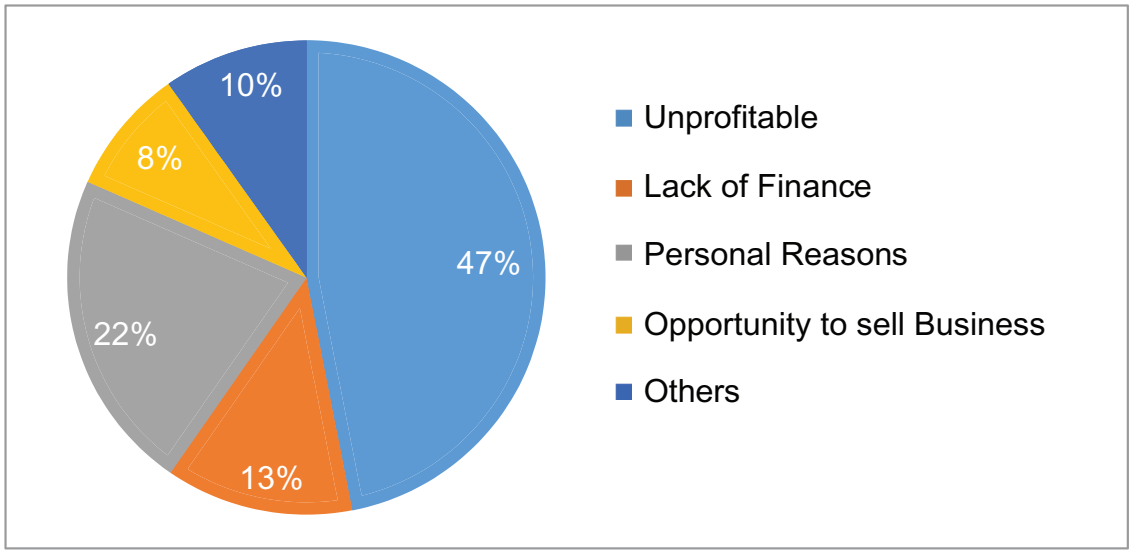
In India, 47% respondents believed that an unprofitable business is the main reason for exiting the business whereas 22% believed that the reasons are personal in nature. Lack of financial support was considered responsible for discontinuation of business in 13% respondents and only 8% believed the reason to be finding an opportunity for selling the business or getting another avenue for job or business. However, the reasons may vary across the years depending on socio-economic conditions of the country. An in-depth study would provide details about the closure of business activities in India.

Figure 4.21: Discontinued Business Rate in 2015 (% of population aged 18-64)



Source: Based on GEM Global Report 2015

Figure 4.22: Reasons for Entrepreneurial Exits in India (% of population aged 18-64)



Source: Based on GEM Global Report 2015-16

4.3.9 Motives for Indian Entrepreneurs

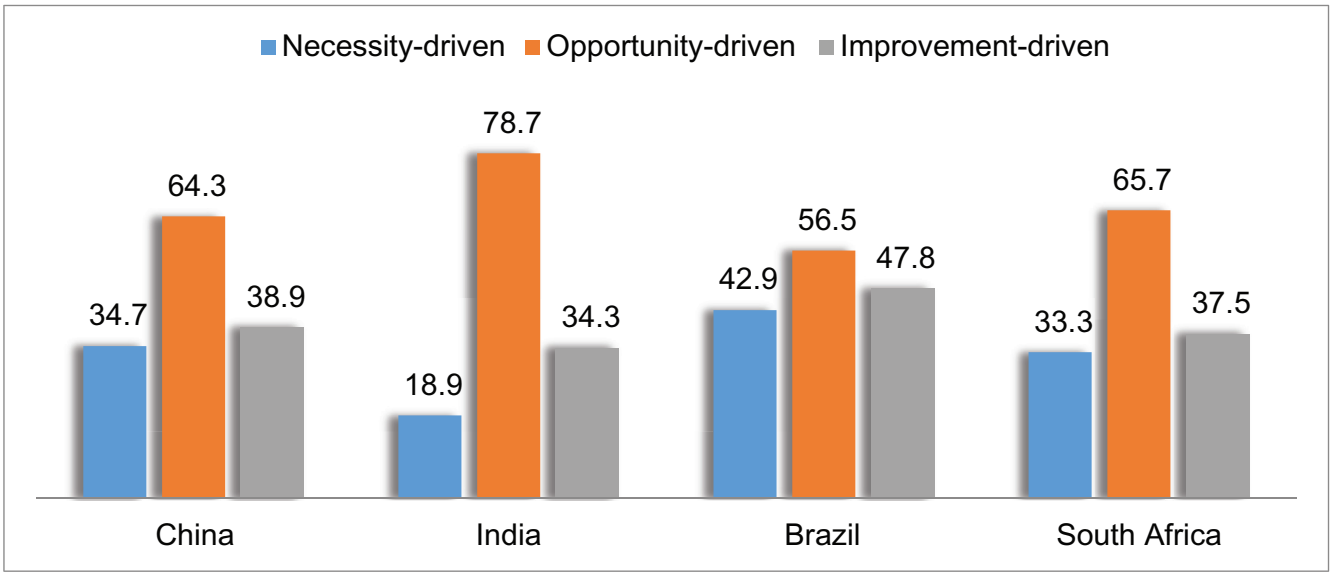
Entrepreneurial activities in various economies can be better understood if the motivational aspect of starting businesses is also included in the study. The GEM conceptual framework has been using necessity-driven, opportunity-driven and improvement-driven motives to understand the entrepreneurial activity.

A necessity-driven entrepreneur is an individual who indicates, in the GEM APS, that he/she has "no better choice for work" or alternative means of survival, because of which the individual is pushed into or rather compelled to become an entrepreneur. Opportunity-driven entrepreneurs voluntarily enter into business to take advantage of a business opportunity and gain profits. Such start-ups are known as opportunity-driven entrepreneurships.

Improvement-driven entrepreneurs are those who started the business, either to earn more money or to be more independent. Figure 4.23 presents motivational differences in early-stage entrepreneurial activity in BRICS countries. Almost 79% of early-stage entrepreneurs were motivated to start a venture by some business opportunities in India, which is the highest amongst BRICS economies including China, South Africa and Brazil. Correspondingly,

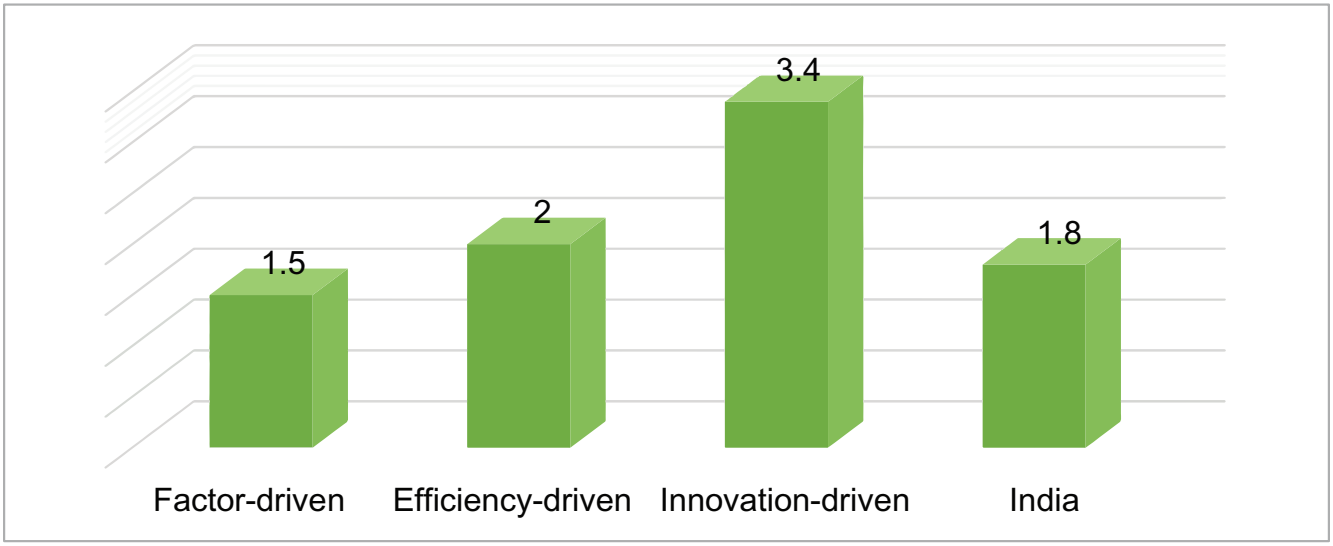
in comparison to 2014, this year only 19% of the early-stage Indian entrepreneurs were forced into entrepreneurship due to a lack of other alternatives and 34% of the adult population were improvement-driven entrepreneurs. As far as improvement-driven motives are concerned, India is ranked lower than other BRICS economies, excluding Russia.[1] For better understanding of motives, GEM has calculated the Motivational Index. Motivational Index is a ratio between necessity-driven entrepreneurs and improvement-driven entrepreneurs, which contributes to better understanding of the entrepreneurial capacity of a country. A high motivational index indicates a high share of improvement-driven entrepreneurs that bring along more long-term and ambitious expectations related to the venture. Figure 4.24 illustrates average of Motivational Index of all categories of economies. The results show that Motivational Index in India has improved (1.8) in comparison to the average of the factor-driven economies (1.5) and close to the average of efficiency-driven economies (2).

Figure 4.23: Entrepreneurial Motivation in BRICS Economies (% of population aged 18-64)



Source: Based on GEM Global Report 2015-16

Figure 4.24 Motivational Index in 2015: A comparison of Economies (% of population aged 18-64)



Source: Based on GEM Global Report 2015-16

[1] Data for Russia was not available for GEM Study 2015

4.4 Entrepreneurial Aspirations

To explore the economic impact of entrepreneurs, GEM measures the job (growth) expectations, innovation and internationalisation profiles of entrepreneurs. Social values towards entrepreneurship, personal attributes and perceptions captured the predictive aspect of entrepreneurship. Value created by an enterprise contributes towards economic development of a nation. Research studies in this direction reveal that entrepreneurial aspirations have been positively associated with economic development (Wong *et al.*, 2005; Wennekers *et al.*, 2010; Bosma, 2011). Entrepreneurial aspirations supplement the entrepreneurship cycle to present a comprehensive picture by addressing the issues related to quality of enterprises. High TEA value, without any growth potential, will have little impact on economic growth and development. Hence, it is the need of the hour to measure entrepreneurship by its output and specific realised functions.

4.4.1 Growth Orientation

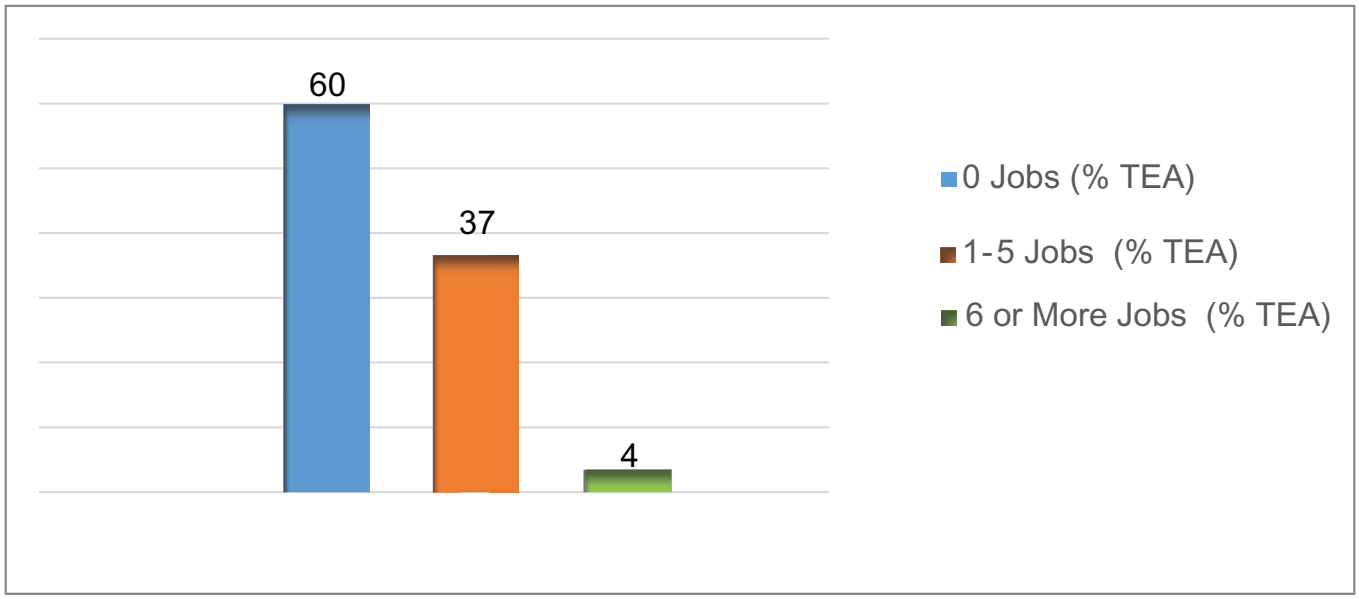
Growth aspiration is a key indicator of the impact of entrepreneurial activities. GEM captures the dimension of growth aspirations in terms of job expectations. To address this issue, GEM asks early-stage entrepreneurs "How many employees (other than the owners) they currently employ and expect to employ in the next five years?" This question explores entrepreneurial expectations with regards to the potential of their businesses and their ambition for growth. To estimate growth aspirations, the most commonly used measure is the entrepreneur's expectation to hire new employees within next five years. Therefore, two levels of growth have been identified by GEM - proportion of entrepreneurs projecting, one to five new hirings and six or more new hiring in their businesses.

Figure 4.25 reveals that 60% of the entrepreneurs have a low job growth orientation and do not intend to expand their employee base, whereas 37% comprise of slow growth companies planning to hire one to five employees. Only 4% companies have expectations of rapid growth and employment generation exceeding six employees.

4.4.2 Economic Activity in India

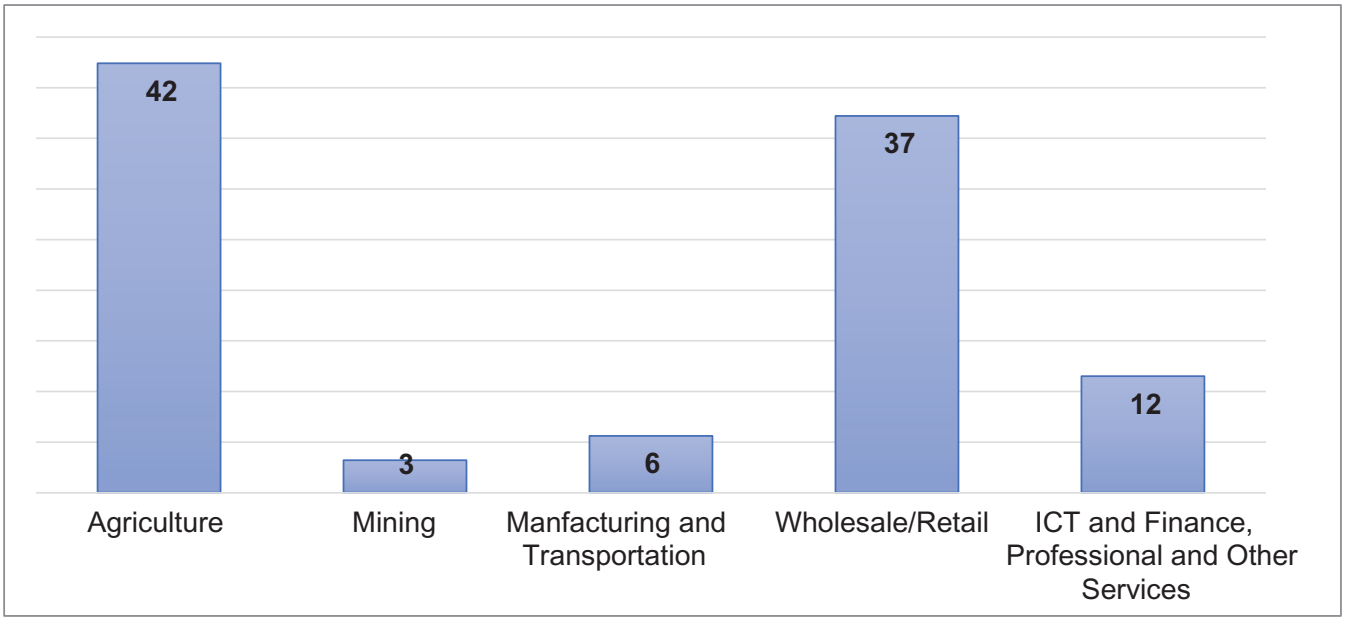
GEM 2015 study found that 42% of respondents preferred agriculture and agro-based enterprises as the major driving force of economic activity in India, followed by trading activities including wholesale and retail (37%) as demonstrated by Figure 4.26.

Figure 4.25 Job Expectations for Early-Stage Entrepreneurs in India (% of population aged 18-64)



Source: Based on GEM India Data 2015-16

Figure 4.26 Economic Activity in India (% of population aged 18-64)



Source: Based on GEM India data 2015-16

4.4.2 Innovation Orientation

Innovation is a key driving force in business success. While the job creation process has medium-term impact on businesses, innovative orientation has a long-term impact. Innovation is viewed in line with Schumpeter's view of innovative entrepreneurship from the perspective of market and industry. Schumpeter defined entrepreneurship as undertakings through innovation, which include, "the introduction of new commodities, technological change in the production of existing commodities, opening up of new markets or new sources of supply, setting up new business organizations" (Schumpeter, 1942). The degree and frequency of innovation always creates a positive impact on economic development. Since innovation is a dynamic process and changes constantly, it is extremely difficult to measure the same. GEM has been using two different ways to assess innovation: (1) Innovativeness of the product or service and (2) Novelty of the technology used.

As far as product innovation is concerned, it is measured in terms of number of customers who consider the product or service as new or unfamiliar. Three levels of product innovation are distinguished: Products/services that are unfamiliar to all (potential) customers, products/services that are unfamiliar to some (potential) customers and products/services that are unfamiliar to no (potential) customers at all.

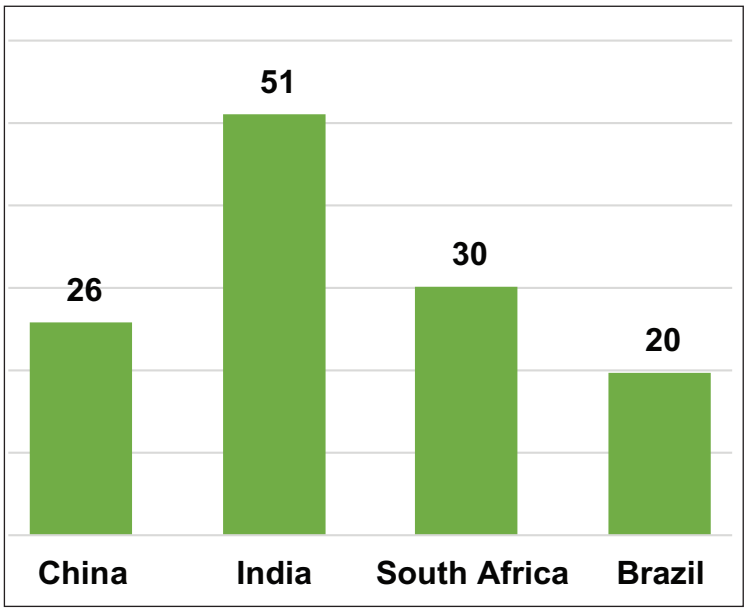
The survey demonstrates that 51% of Indian early-stage entrepreneurs have introduced new products for all or some customers and few or no other businesses offer the same product. India has ranked in the top strata among other BRICS economies as shown in Figure 4.27

4.4.3 International Orientation

The third dimension of entrepreneurial aspirations is internationalisation of business. In the era of global economies, global trade becomes more important for any type of business. Export of goods and services suggests the competitive advantage of the firm to meet international standards and compete in the global market. In this study, the international orientation of business is measured in terms of foreign clients. According to GEM, for internationalisation, a business must have at least 25% of clients belonging to foreign nations. India, however, ranks in the bottom percentile in terms of international growth aspirations. Almost 58.6% of Indian entrepreneurs cater only to the domestic market whereas only 12% entrepreneurs

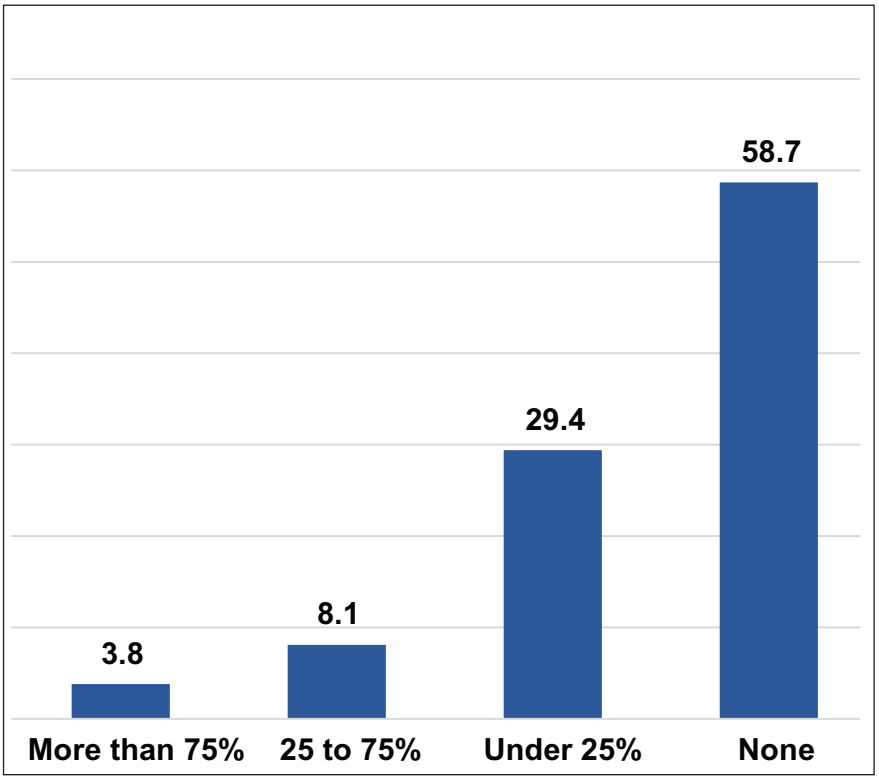
aspire for international growth as demonstrated by Figure 4.28. Entrepreneurs need to be provided appropriate and adequate incentives to establish export-oriented high impact firms, which are critical for resolving India's Current Account Deficit and Balance of Payment problems.

Figure 4.27 Innovation Orientation- A comparison of BRICS Economies (% of population aged 18-64)



Source: Based on GEM Global Report 2015-16

Figure 4.28: Export Intensity, grouped by Early-Stage Entrepreneurial Activities in India (% of population aged 18-64)



Source: Based on GEM India Survey 2015-16

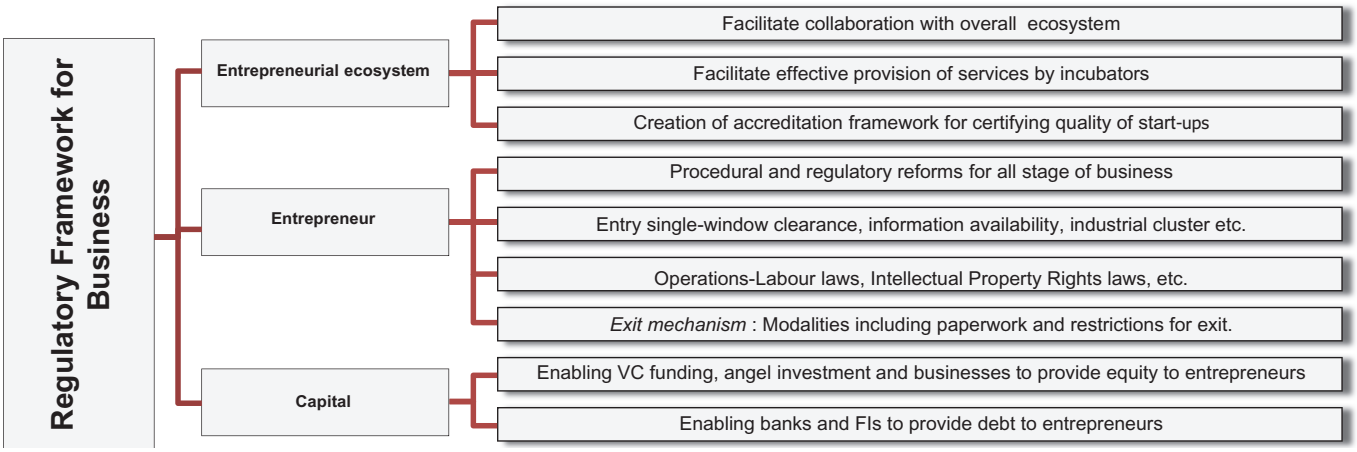
CHAPTER 5

ENTREPRENEURSHIP FRAMEWORK CONDITIONS IN INDIA: NATIONAL EXPERT SURVEY

India adopted new economic policies of liberalisation, privatisation and globalisation way back in 1991 and opened its economic corridor to interaction, interface competition and cooperation with international markets. Since 1991, Indian community has germinated different indigenous first generation entrepreneurs like Infosys, Bharti Enterprises and Wipro, who started their business at grassroots level in India and later reached an international corporation status. Along with core technology development, the Indian ecosystem witnessed a promising increase among the number of innovative and imitative start-ups, which were committed to making innovative products and services for Indians by Indians like Flipkart, Housing.com, OYO Rooms, Paytm and others.

Despite having promising potential for enterprise creation, Indian enterprise ecosystem has failed to create a proportionate number of successful entrepreneurs. Nascent entrepreneurs' (who intend to start MSMEs and start-ups) survival rate in India is alarming. Indian ecosystem is unable to create or support ventures in the early days of their operation. Every economy in transition faces a similar situation. The real challenge is to make Indian enterprises capable enough to efficiently, effectively manage their resources, optimise their strengths and align as well as improve their products, or services with customer's aspirations' through technological foresightedness. Indian policy interventions are trying hard to bring tangible and intangible resources like office space, mentoring support, technology upgradation, networking, intellectual property protection etc. through a bunch of business incubation facility networks, with different sector-specific bodies like biotechnology, agriculture, nanotechnology, remote sensing, IT/ ITeS and others. However, despite having initiated these ecosystem enabling mechanisms, India is far behind other innovation-driven and efficiency-driven economies. Indian start-ups and enterprises in product commercialisation, indicate a gap in Indian ecosystem and demand strategic grassroots interventions. Unfortunately, the stages of start-up lifecycle have not been taken care of in these interventions, education system and cognitive understanding of society at large. Keeping in mind the geographical vastness, resource diversity and demographic richness of the country, India has a few incubation support facilities with very limited resources pool. This is obviously visible through the stories of failing start-ups due to product-market mismatch, inappropriate or no prototype and others. These serve as limitations to start-ups. Currently, India has approximately 90-120 Technology Business Incubators (TBIs) supported by Department of Science and Technology (DST) Government of India and affiliated to educational institutions, while USA has 178 TBIs supported by universities, corporates, government organisations or with venture capital support. To improve the condition of start-up ecosystem in the country, India must learn from the world's best incubation facilities. Research indicates that the USA model for entrepreneurship support system has huge potential to be implemented, albeit with appropriate customisation. Dedicated focus and rigorous efforts are required to strengthen the current entrepreneurial ecosystem in India.[1]

Figure 5.1: Regulatory Framework Conditions



Source: GEM India Team derived this model from the existing GEM Model

[1] GEM India 2014

Business environmental factors are very important while devising any policy intervention to support entrepreneurs in early phase of their start-ups, because business environment strongly influences the survival, growth and success of these new entrants (Figure 5.1). India faces a lack of robust financial resource pool dedicated to entrepreneurship due to which the mortality rate of high technology firms is high. In contrast, in the US financial market, besides Venture Capital, there are many customised and well-suited financial instruments to support new business creation as well as growth.

In innovation-driven economies, the influence of knowledge accumulated by formal education and training is very high, which propagates high technology-driven firms' creation as well as growth. In addition, research indicates that there is a strong correlation between the geographic location of innovation and pace of entrepreneurial activity (Kolympiris, Kalaitzandonakes, and Miller, 2015; Li, Goetz, Partridge, and Fleming, 2015; Stearns, Carter, Reynolds, and Williams, 1995; Wright, Liu, Buck, and Filatotchev, 2008). In Innovation-driven economies like USA, most of the high technology firms or ventures are established in proximity of universities, research labs.

Numerous factors influence the intensity and intention of an individual. Research indicates that culture strongly influences the entrepreneur's behaviour, attitude and overall effectiveness (Hopp and Stephan, 2012; Huggins and Thompson, 2014; Jang, Ko, and Kim, 2016). Family background, prior experience, entrepreneurial orientation of parents and others also influence entrepreneurial behaviour. Network of an entrepreneur is positively and monotonically related to the amount of risk-taking possibility, amount of business information available and entrepreneur's ease of capital accumulation.

Keeping in view the international ranking of India in the start-up ecosystem and with the proof that start-ups can work in India, many young college graduates and working professionals are venturing towards entrepreneurship as a career option. Although factors like enthusiasm, market conditions and talent pool are strengthening the start-up movement in India, the holistic entrepreneurial infrastructure is not at par with international standards, demands and expectations. Hence, India is lagging behind its global counterparts on account of lack lusture contribution from stakeholders like government agencies, regulatory bodies, SMEs or educational, training, R&D institutions.

Entrepreneurship development in a country is influenced by its entrepreneurship ecosystem. Global GEM study has designed the National Expert Survey (NES) to analyse the Entrepreneurship Framework Conditions (EFCs) prevailing within the country (Figure 5.2).

GEM classifies the EFCs into nine different categories - financing, government policy, government programmes, education and training, R&D transfer, physical infrastructure, commercial infrastructure, market openness and cultural and social norms. Apart from these nine, EFC assessments have identified major factors that promote entrepreneurship and constraints that hinder the same in India. EFC assessments also offer recommendations for improving entrepreneurial activities across the country.

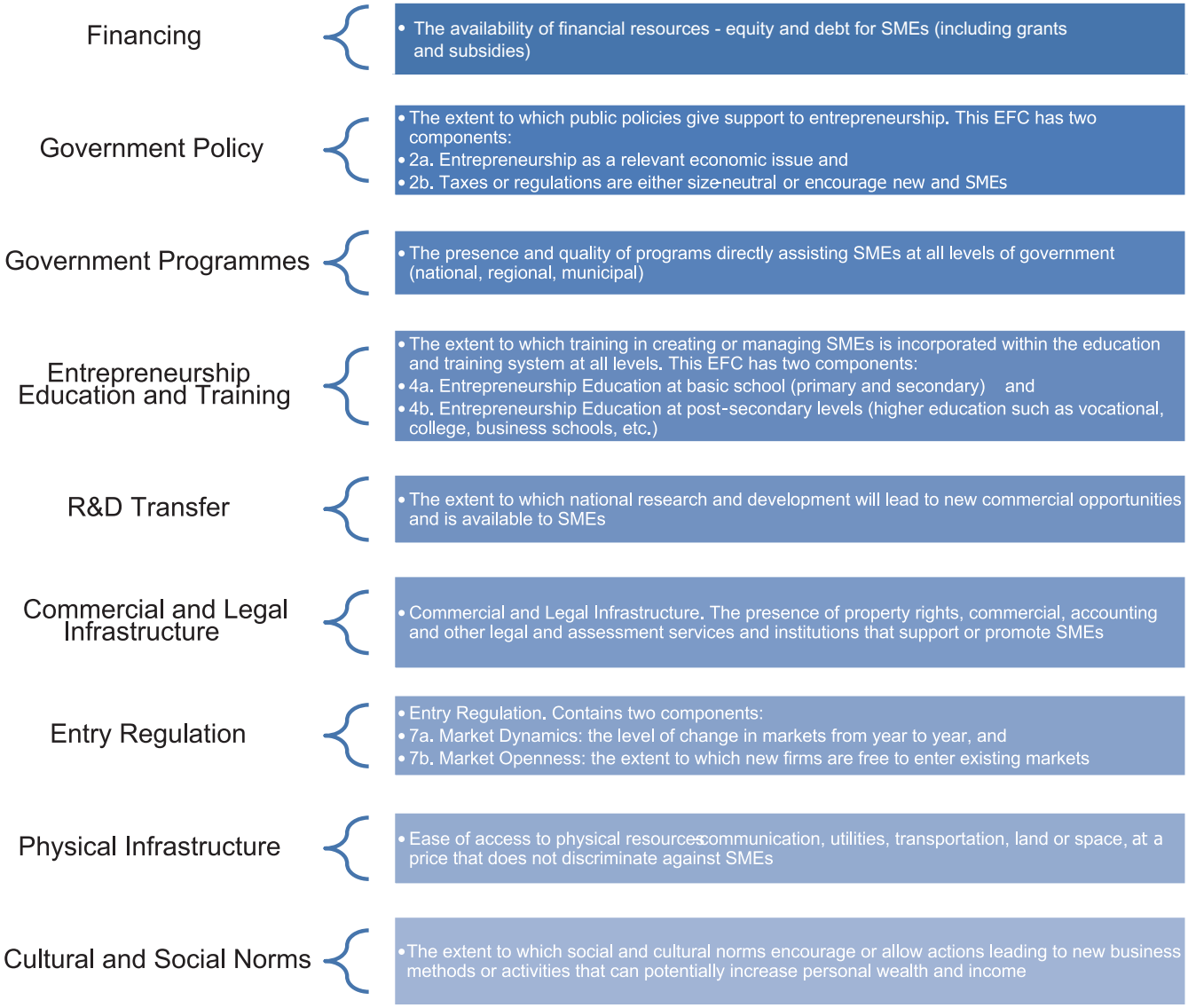
5.1 Entrepreneurship Financing in India

As far as financing is concerned, India has created necessary facilities for new and growing businesses.

Table 5.1: Entrepreneurship Financing in India

There is sufficient equity funding available for new and growing firms.	5.75
There is sufficient debt funding available for new and growing firms.	5.91
There are sufficient government subsidies available for new and growing firms.	6.24
There is sufficient funding available from informal investors, who are private individuals, for new and growing firms.	6.39
There is sufficient funding available from professional Business Angels for new and growing firms.	5.95
There is sufficient funding available from Venture Capitalists for new and growing firms.	6.07
There is sufficient funding available through Initial Public Offerings (IPOs) for new and growing firms.	5.5
There is sufficient funding available through private lenders' funding (Crowdfunding) for new and growing firms.	5.3

Figure 5.2: Entrepreneurial Framework Conditions



Source: GEM Model for National Expert Survey

Entrepreneurship financing in India has been rated above average by experts. In comparison to the secondary data of GEM India Survey 2014, the items dedicated to assess the financial status have been enhanced by the inclusion of two more items (related to Angel Investors and Crowdfunding). Informal sector funding and Venture Capital availability are inspiring for new age start-ups, but there is need to enhance the confidence and capabilities of entrepreneurs as well as investors to strengthen IPO-based funding for a more sustainable and long-term growth of firms. The indicator 'Crowdfunding', which is new to India as a formal and fashionable concept as well as a tool to attract funding its initiation, is really inspiring. But, the community needs formal governance directives on the Crowdfunding mechanism. Current status indicates that it has great potential to serve the nation in making of an enterprising ecosystem.

5.2 Government Support and Policies in India

Policy mechanism is under positive transition mode towards the making of a strong start-up ecosystem. The governments at both state and central level are trying to synchronise and modernise their policies to strengthen entrepreneurship in the country. This is visible in the country's budget allocation too. The 2015-16 Budget was dedicated to empowering the

entrepreneurial community at all levels, be it MSMEs or corporations. Make in India initiative was launched by the Prime Minister in September 2014 as part of a wider set of nation-building initiatives. Devised to transform India into a global design and manufacturing hub, Make in India was an extremely timely response to a critical situation[2]. Several proposals announced by the Finance Minister suggested that the government was serious about unlocking India's entrepreneurial power to fuel desperately-needed jobs and economic growth. Similarly, in response from NES of GEM 2015, experts rated government's initiatives on policy formation for new and growing firms above midpoint. This response indicates that there is some need to match the local administration level policy implementation to support incentives led by the national level government.

5.3 Taxes and Bureaucracy in India

The levels of corruption in bureaucracy rose after liberalisation in 1991. This contradicts the notion that red-tapism during the era of License Raj, when licenses and permits were more important than market forces and the bureaucrats wielded enormous powers, was responsible for corrupt practices that exploited the system by demanding and accepting bribes for speedy processing of paperwork[3].

According to NES, available data stands below average in all parameters (Table 5.2). Even after adoption of liberalisation, privatisation and globalisation policies way back in 1991; India has failed to provide a supportive ecosystem for enterprise creation and growth. There is still a huge need for functional innovation at the level of government regulatory bodies, which acts as a key factor in the ease of starting a business. The permit and licensing system needs to be oriented towards lean management. Government should bring in tax related reforms, which could enhance the confidence of entrepreneurs as taxpayers and a more elaborative tax holiday period for entry-level entrepreneurs, MSMEs. Government offices need a more transparent governance system to enhance the confidence of entrepreneurs. The interaction and outreach activities of each government office should be made compulsory, thus creating an environment where entrepreneurs would be comfortable communicating with government system and taking maximum benefit of the government mechanisms.

Table 5.2: Government Support and Policies in India

Government policies (such as public procurement) consistently favour new firms.	5.36
Support for new and growing firms is a high priority for policy at the national government level.	5.87
Support for new and growing firms is a high priority for policy at the local government level.	5.27

Source: GEM India Survey 2015-16

Table 5.3 Taxes and Bureaucracy in India

New firms can get most of the required permits and licenses in about a week.	3.22
The amount of taxes is NOT a burden for new and growing firms.	4.28
Taxes and other government regulations are applied to new and growing firms in a predictable and consistent way.	4.88
Coping with government bureaucracy, regulations and licensing requirements is not unduly difficult for new and growing firms.	3.41

Source: GEM India Survey 2015-16

Table 5.4 Government Programmes in India

A wide range of government assistance for new and growing firms can be obtained through contact with a single agency.	3.85
Science parks and business incubators provide effective support for new and growing firms.	5.42
There are an adequate number of government programmes for new and growing businesses.	5.33
People working for government agencies are competent and effective in supporting new and growing firms.	4.28
Almost anyone who needs help from a government program for a new or growing business can find what they need.	4.32
Government programmes aimed at supporting new and growing firms are effective.	4.61

Source: GEM India Survey 2015-16

[2] http://www.makeinindia.com/about1

[3] http://www.elections.in/blog/causes-of-corruption-in-indian-bureaucracy/#sthash.Ow7A2Uzi.dpuf

5.4 Government Programmes in India

The Government of India has been trying to create a portfolio of initiatives, schemes and policies to enhance entry of new entrepreneurs. And, it has been consistently realised that the youth are inclined towards choosing entrepreneurship as a career choice. As per the GEM India Survey (Table 5.4), NES indicates that the Government needs additional interventions to enhance single-window facilities for doing businesses, which is far below than the average count of 3.85.

In recent years, the number and availability of effective business incubators, new enterprise creation-oriented programmes and growth-oriented schemes has increased in the Indian context. But, there is a need to improve government agency working conditions, orientation and approachability for a common citizen of India who wishes to seek government's help in creation or growth of his/her enterprise.

5.5 Education – Primary and Secondary level in India

Research indicates that education is important for the development of a knowledge economy. An entrepreneurial mindset at primary and secondary school levels is critical to the future of innovative India. The Government of India is in the process of evaluating need to bring in entrepreneurship education to the secondary level, with a module-based on entrepreneurial traits like leadership, creativity, innovation, risk-taking appetite and others, for students at the primary level, which will promote holistic growth among school children. It is high time to bring in such integration at school level.

Table 5.5 Education – Primary & Secondary in India

Teaching in primary, secondary level education encourages creativity, self-sufficiency and personal initiative.	4.68
Teaching in primary, secondary level education provides adequate instruction in market economic principles.	4.04
Teaching in primary, secondary-level education provides adequate attention to entrepreneurship and new firm creation.	3.66

Source: GEM India Survey 2015-16

NES of GEM 2015 (Table 5.5) indicates that the level of entrepreneurial traits like creativity, self-sufficiency and personal initiative are close to the average score, but inputs related to market understanding and technical know-how of enterprise creation are lacking in a lot of primary and secondary level education systems in India.

5.6 Education – Post-Secondary level in India

Entrepreneurship Education plays an extremely important role in the choice of entrepreneurship as a career option (Edelman, Manolova and Brush, 2008; Karimi, Chizari and Biemans, 2010; Menzies and Paradi, 2003). Therefore, entrepreneurship is considered to be the most important factor for economic growth and growth of entrepreneurship is positively related to the quality and availability of entrepreneurship education. Entrepreneurship education has been regarded as a key instrument in influencing entrepreneurial attitude of potential as well as nascent entrepreneurs.

Majority of the educational courses in India are reflecting the trend of including entrepreneurship, be it technical education, pure science or social science, into their curricula. The importance of entrepreneurship has been recognised as a catalyst in creating entrepreneurial populace in that particular stream of knowledge. There are many institutions working towards the formalisation of entrepreneurship education. Educational institutions like EDII, IITs, IIMs, NEN are visible players in the shaping of entrepreneurship education in India.

According to NES of GEM 2015, the incubation support at college and university levels is below average with 4.43 points. However, the level of entrepreneurship orientation stands neither very positive nor very negative, hanging close to the average score.

Table 5.6 Education – Post-Secondary level in India

Colleges and universities provide good, adequate preparation for start-ups and growing new firms.	4.43
Level of business and management education provide good, adequate preparation for start-ups and growing new firms.	5.34
Vocational, professional and continuing education systems provide good, adequate preparation for start-ups and growing new firms.	5.39

Source: GEM India Survey 2015-16

5.7 Commercial and Professional Infrastructure in India

In India, the Ministry of Corporate Affairs, Ministry of MSME and DIPP work together in a synchronised manner. India follows a common accounting, governance mechanism and standards for systematic business operations.

Table 5.7 Commercial and Professional Infrastructure in India

There are enough subcontractors, suppliers and consultants to support new, growing firms.	4.99
New, growing firms can afford the cost of using subcontractors, suppliers and consultants.	4.61
It is easy for new, growing firms to get good subcontractors, suppliers and consultants.	4.8
It is easy for new, growing firms to get good, professional legal and accounting services.	5.01
It is easy for new and growing firms to find good banking services (checking accounts, foreign exchange transactions, letters of credit and the like).	5.77

Source: GEM India Survey 2015-16

According to the feedback of NES GEM 2015, commercial and professional infrastructure scored above midpoint. Financial instruments like availability of banking facilities has the highest score of 5.77, followed by availability of facilities like subcontractor, suppliers and consultants, professional firms for the support of new venture creation as well as growth, which is above midpoint. However, the ease of assessing these support mechanisms for a new entrant is comparatively low as indicated in Table 5.7

5.8 Internal Market Dynamics in India

India's economic environment is passing through a paradigm shift. It has undertaken several measures to support economic reforms, infrastructural development, technological upgradation and the likes. However, it is dynamic in nature and is greatly affected by the global environment. Global securities, commodities, currency, technology and job market, all influence the Indian market. Along with these external market opportunities and challenges, India has its own issues of internal dynamics. Rich demographic dynamics is promising for India and by the year 2020, India is expected to become the world's youngest emerging economy.

NES indicates (Table 5.8) that the market for consumer goods and services underwent significant change (NES Score 5.85) from year to year, while the market for business-to-business goods and services has also changed significantly (NES Score 5.58).

Table 5.8: Internal Market – Dynamics in India

Markets for consumer goods and services changed dramatically from year to year.	5.85
Markets for business-to-business goods and services changed dramatically from year to year.	5.58

Source: GEM India Survey 2015-16

5.9 Internal Market Openness in India

India adopted policies of liberalisation, privatisation and globalisation as a historic reform in 1991. There is significant evidence that different countries have benefited out of such policies. At the same time it also comes along with many challenges and opportunities. As per GEM India 2015 Survey (Table 5.9), the Government worked towards market openness and ease of entry for new and growing firms, but experts' opinion is not so encouraging - it is just above midpoint (4.81). The cost of market entry has been identified as another factor affecting the entry of new and growing firms into the market (4.62). However, it is found that anti-trust legislations are well enforced as well as effective (5.08)

Table 5.9: Internal Market Openness in India

New and growing firms can easily enter new markets.	4.81
New and growing firms can afford the cost of market entry.	4.62
New and growing firms can enter the markets without being unfairly blocked by established firms.	4.81
The anti-trust legislation is effective and well enforced.	5.08

Source: GEM India Survey 2015-16

5.10 Physical Infrastructure in India

India is one of the fastest growing economies in the world today, along with a very conducive start-up ecosystem. In the current global and dynamic economic environment, every economy is trying to compete with each other and they face several challenges. Despite being a factor-driven economy, India is demonstrating significant positive points above average. According to NES GEM 2015-16 data (Table 5.10), the availability of physical infrastructure like roads, utilities, communications, water and others stands at 4.96 points and experts

indicate that communication and connection infrastructure related to the internet, phone, gas, water, electricity and others are easily available at affordable cost (Table 5.10).

Table 5.10: Physical Infrastructure in India

Physical infrastructure (roads, utilities, communications and water disposal) provides good support for new and growing firms.	4.96
It is not very expensive for a new or growing firm to get good access to communications (phone, internet and others).	6.42
A new or growing firm can get good access to communications (telephone, internet and others) in about a week.	6.52
New and growing firms can afford the cost of basic utilities (gas, water, electricity, and sewer).	6.46
New or growing firms can get good access to utilities (gas, water, electricity, and sewer) in about a month.	6.29

Source: GEM India Survey 2015-16

5.11 Research and Development Transfer in India

Technology transfer and commercialisation is one of the most important factors, which indicate the potential of any nation with respect to entrepreneurship. India is dedicated to the development of R&D through indigenous sources, but the pace of technology development happening across the world seamlessly affects the Indian market as well. Interdisciplinary and interdepartmental interaction is very crucial for technology commercialisation and development through long-term R&D processes.

According to NES GEM 2015, the ease of technology transfer and the capacity, affordability of transferring technology from university or public R&D labs (3.95) as well as acquiring new technology by new and growing firms (3.62) is far below average. However, experts indicate that support mechanisms like subsidies (4.63), incentives for commercialization of R&D through technology-based venture creation (5.31), student idea realisation and start-up development support (5.12) have encouraging figures.

Table 5.11: R&D Transfer in India

New technology, science and other knowledge is efficiently transferred from universities and public research centres to new, growing firms.	3.95
New, growing firms have just as much access to new research and technology as large, established firms.	4.03
New and growing firms can afford the latest technology.	3.62
There are adequate government subsidies for new and growing firms to acquire new technologies.	4.63
The science and technology base efficiently supports the creation of world-class new technology-based ventures in at least one area.	5.31
There is good support available for engineers and scientists to have their ideas commercialized through new, growing firms.	5.12

Source: GEM India Survey 2015-16

5.12 Cultural and Social Norms in India

Cultural value is one of the most important factors which influence an individuals' choice of being an entrepreneur, by affecting their behaviour and perception. All the items indicate that prevailing cultural and social norms in India are rated close to and above midpoint- the perception towards individual importance related to success and strategy adoption for success is closely associated with cultural belongingness. National culture regarding the encouragement of entrepreneurial risk-taking is 4.97, which indicates that there is room for improvement. According to NES GEM 2015 data, the score of national culture emphasising upon self-sufficiency, autonomy and perception initiative with encouragement related to creativity and innovativeness is above average points (Table 5.12).

Table 5.12: Cultural and Social Norms in India

National culture is highly supportive of individual success achieved through own personal efforts.	5.54
National culture emphasises self-sufficiency, autonomy and personal initiative.	5.46
National culture encourages entrepreneurial risk-taking.	4.97
National culture encourages creativity and innovativeness.	5.59
National culture emphasizes upon the responsibility that the individual (rather than the collective) has in managing his or her own life.	5.62

Source: GEM India Survey 2015-16

In recent years, India has been recognised as a supportive ecosystem for start-ups, which is supported by NES GEM 2015 data. This data demonstrates that the nation's culture encourages entrepreneurial risk taking behaviour, creativity and innovativeness.

5.13 EFC's Comparison across Economies (Factor, Efficiency and Innovation-Driven) 2015

WEF's Global Competitiveness Report provides an analysis of many of the driving forces that enable national economies to achieve sustained growth and long-term prosperity. It divides countries into three different stages, which are consistent with the general Economic Development Theory:

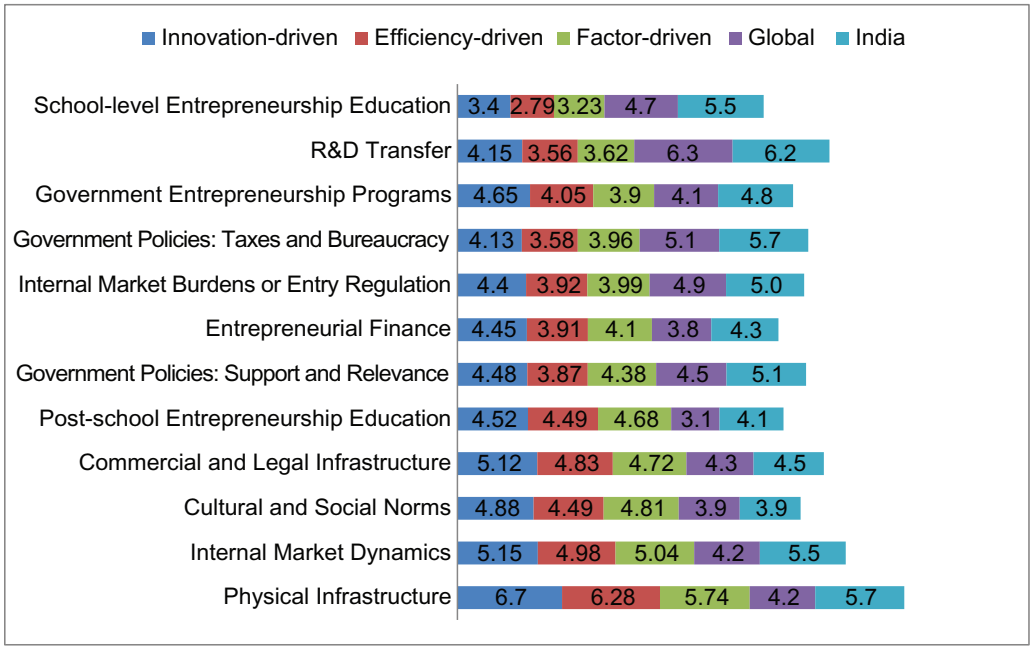
- Stage 1 'Factor'-driven (FD) economies, where countries compete primarily on the use of unskilled labour, natural resources, and companies compete on the basis of price as they buy and sell basic products or commodities.
- Stage 2 'Efficiency'-driven (ED) economies, where growth is based on the development of more efficient production processes and increased product quality.
- Stage 3 'Innovation'-driven (ID) economies, where companies compete by producing and delivering new, different products and services by using the most sophisticated processes.

India is largely still in Stage 1, i.e. a factor-driven economy. Hence, the GEM India Team is considering the comparison of India with different stages of economies (Figure 5.3). The status of the Indian economy is improving and has improved with comparison to a certain set of similar economies, but there are still many areas that need to be improved upon.

School-level entrepreneurship education in India is positioned at 5.5, which is more than comparative economic stage (ID-3.4; ED-2.79; FD-3.23) counterparts as well as the global score (4.7), while the score of post school entrepreneurship education in India stands below the average score of all stages of economies (4.1), which is just above the global score (3.1). In terms of R&D transfer, Indian score is 6.2, which is less than the global score (6.3) by only 0.1 point and more than any other economic stage mean (ID-4.15; ED-3.56; FD-3.62). Government entrepreneurship programmes score in India is at 4.8, which is less than ID economies (4.65), but more than the ED and FD economies as well as the global score mean (4.1). India scores above any stage of economy as well as the global standard score with respect to: taxes and bureaucracy, internal market burdens or entry regulation. With respect to entrepreneurial finance (mean score - 4.3) and Government policies: support and relevance (mean score - 5.1), India stands below ID economies, but above both ED and FD economies.

India stands below all economies scores' in context to commercial and legal infrastructure (4.5), cultural and social norms (3.9) and internal market dynamics (3.9). Moreover, India is positioned below the other economies with respect to physical infrastructure with a mean score of 5.7.

Figure 5.13: EFC's Comparison across Economies 2015 (global score)



Source: GEM India Survey 2015-16

5.14 Social Entrepreneurship in India

India, as a developing economy, has many grassroot-level problems which need serious attention and exploration of social solutions. A promising school of social innovators and solution designers is coming to India from across economies to act entrepreneurially while dealing with the solution of social issues and problems. GEM NES 2015 considered social entrepreneurship to assess the entrepreneurial framework prevailing in India (Table 5.13). All the variables related to accessing the potential of social entrepreneurship in India indicate that the Indian score stands above average. Indian market, innovators, educators, policymakers and consumers are very optimistic about the relevance of social entrepreneurship in India. Keeping the population size and demographic diversity in mind, experts feel that the solution for poverty does not come solely from government policy funding. Hence, they cannot rely on the government or civil society organisations with an average score of (5.46), which clearly indicates that experts feel the need of self-sustainable solutions in an enterprise format, globally termed as social enterprise. In Indian ecosystem, the presence of social entrepreneurs is gaining prominence. According to NES GEM 2015 Survey (Table 5.13), the efficiency and effectiveness of social enterprises has been much enhanced.

5.15 Constraints, Fostering Factors and Recommendations to Strengthen Entrepreneurship in India

NES GEM 2015 has identified financial support, education and training, cultural and social norms as major constraining factors to entrepreneurship in India, followed by government policies and political, institutional and social context (Table 5.14). Apart from these constraints, numerous factors have been identified which contribute to foster the entrepreneurial activities in India. A major factor among these is education and training, which is clearly visible with India's position in the ranking of start-up ecosystem reports, development of information and increase in knowledge, technology-based enterprises. Students are not only strengthening the workforce but are also aspiring to be self-employed or lead start-ups by using their skill education. India is in the factor-driven stage of economic development, but a large chunk of Indians are aspiring to lead innovation-based start-ups. Education and training system of India helps in fostering the initiation and growth of these start-ups. The Government of India had realised the importance of policy interventions a long time ago and various holistic strategic moves through policy interventions have been taken up at different levels. These strategic moves enhanced the confidence of experts in the potential of government policies to serve the nation as entrepreneurship booster. As factors such as education and training, government policies are enhancing their potential to support the entrepreneurial ecosystem, financial bodies are gaining confidence followed by internal market openness, capacity of entrepreneurship, R&D transfer, and government programmes (Table 5.15).

NES GEM 2015 recommended a series of interventions to improve and emphasise upon improving the entrepreneurial activity in India. The recommendation frequency indicates that there is a need for improvement in education and training along with government policies (with the same score 44.9) followed by

Table 5.13: Social Entrepreneurship in India

	Score
People live in poverty, but cannot rely on the government or civil society organisations.	5.46
Existence of many businesses that provide people with basic needs, which are covered by governments and civil society organisations in other countries.	5.71
Social, environmental and community problems effectively solved by businesses instead of the government, civil society organisations.	5.09
Entrepreneurs' associations/groups challenge existing regulations that negatively impact particular groups in the society or environment.	5.06
Government brings together potential entrepreneurs, businesses and civil society organisations around specific social, environmental or community projects.	5.03
Pressure exerted on businesses by consumers to address their social and environmental needs.	5.09
Availability of sufficient private, public funds for new and growing firms that aim at solving social and environmental problems.	4.75
Media attention on new, growing firms that combine profits with positive social and environmental impact.	5.84

Source: GEM India Survey 2015-16

financial support, economic climate, commercial infrastructure, cultural and social norms and political, institutional and social context.

Table 5.14: Constraining factors to Entrepreneurship

Rank	Constraining Factors	%
1	Financial Support	50
2a	Education and Training	30
2b	Cultural and Social Norms	30
3	Government Policies	26
4	Political, Institutional and Social Context	24

Source: GEM India Survey 2015-16

Table 5.15: Fostering Factors for Entrepreneurial Activities in India

Rank	Supporting Factors	%
1	Education and Training	36.73
2	Economic Climate	32.65
3	Financial Support	28.57
4	Internal Market Openness	24.49
5	Capacity for Entrepreneurship	20.41
6	R&D Transfer	18.37
7	Government Policies	14.29
8	Government Programmes	10.2

Source: GEM India Survey 2015-16

Table 5.16: Recommendations to Improve Entrepreneurial Activities in India

Rank	Recommendation	%
1a	Education and Training	44.9
1b	Government Policies	44.9
2	Financial Support	36.73
3	Economic Climate	18.37
4a	Commercial Infrastructure	16.33
4b	Cultural and Social Norms	16.33
4c	Political, Institutional and Social Context	16.33

Source: GEM India Survey 2015-16

CHAPTER 6

CONCLUSION AND POLICY IMPLICATIONS

Developing economies have tried various approaches to achieve economic growth and development. Since independence, India has followed the path to economic progress through import substitution and export promotion, thus kick-starting the industrialisation process. However, this approach created severe market distortion by way of strong government intervention. These interventions by the government resulted in complex bureaucracy and red tapism, which further promoted corruption and blocked opportunities for entrepreneurship. Subsequently, with the opening up of the economy, entrepreneurship was considered as the major driving force behind economic growth. Deriving inspiration from the following quote by British Economist FE Schumacher, "Small is Beautiful", India's small entrepreneurial ventures have demonstrated significant impact through their integration with technology, innovation along with efficient allocation as well as mobilisation of the factors of production.

The discourse on entrepreneurship in emerging economies is distinct and covers a varied range of issues from culture and values, institutional barriers such as financial sector development, governance and property rights, to the adequacy of education and technical skills. Post the transition from a centralised to market economy, entrepreneurship lies at the core of India's sustainable economic development. As Landes (1998) puts it, "Entrepreneurship has played an important role in economic growth, innovation and competitiveness and it may also play a role over time in poverty alleviation". Entrepreneurs often take over the role of agents of change in the process of economic development. Over 400 million individuals in the developing countries are owners or managers of new firms (Reynolds, 2004) and according to Michael Klein in the World Bank Conference, over 200 million of such enterprises exist in India and China. Yet there is a lack of understanding about the nature of entrepreneurship in developing countries as well as around the world. However, the World Business Environment Survey (WBES) and the GEM project have helped us better understand the diversity, if not the dynamics of new firm formation in developing countries.

India is at a sweet spot in its evolution and is considered to be one of the fastest growing economies in 2015-16. It is in a unique position in terms of the opportunities available due to market size, demographic dividend, rising middle class and others, while at the same time challenges such as rigid regulations, complex tax structure and corruption, are vastly influencing the entrepreneurial landscape.

The GEM India Report 2015-16 attempts to unveil the entrepreneurial dynamics in the country. This report provides data and analysis that can help academicians, researchers, policymakers and professionals to take appropriate action for enhancing economic growth with absolute focus on broad-based entrepreneurship development. Another significant contribution is that it enables us to assess how entrepreneurial activity and profiles change with political, socio-economic development over a period of time. The report examined key aspects of entrepreneurship among Indians by measuring their attitudes, activities and aspirations. The findings of this report can provide policy-makers with a foundation for reviewing the current and prospective policies with an aim to enhance and highlight the vital role and need for entrepreneurship in India. Major findings and appropriate recommendations for policymaking are highlighted in this chapter. The findings are based on a survey of 3,413 adults sampled across the country. To ensure national representation of population and generalisation power of findings, appropriate weights were used for age groups, gender and urban-rural classifications. In the 2015-16 report, an attempt has been made to highlight the entrepreneurial activities in four Indian states of Gujarat, Madhya Pradesh, Chhattisgarh and Jammu Kashmir.

6.1 Key Points from Adult Population Survey (APS)

- In India, adults are generally positive towards entrepreneurship as a career option and entrepreneurs receive high status. GEM India 2015 showed that 40% of Indian adults, in the age group 18-64, consider entrepreneurship as a desirable career choice; close to 47% adults think that entrepreneurs enjoy high self-esteem and status in society and about 39% believe that there is enough media attention on entrepreneurship. However, India ranks below its peers in the factor-driven economies as well as among the BRICS nations, except Russia on these measures. The data for Russia was not available for this study.
- Among the four Indian states, Gujarat and Chhattisgarh ranked high in entrepreneurship as a preferred career choice (64% and 42%, respectively) in

comparison to Madhya Pradesh and Jammu & Kashmir (23% and 27%, respectively).

- GEM India 2015 found that in India, 6% of the adult population comprises new firm entrepreneurs and another 3.2% of nascent entrepreneurs who are actively trying to start a business. Thus, 11% of the adult population is engaged in some aspects of TEA. However, the Indian TEA rate is considerably lower than the average of all categories of economies whereas nascent entrepreneurs rate higher than the average of BRICS nations.
- Thirty eight (percent adults in India acknowledge the existence of good opportunities to start a business as well as perceive their capabilities to start a business, respectively; and 44% of the adult population would be prevented from doing so on account of fear of failure.
- The Survey reveals that 32% of Indian women are involved in early-stage entrepreneurship in comparison to 50% men. Hence, there is a likelihood that an individual engages in early-stage entrepreneurial activity is influenced by gender. Indian men are twice more likely to be involved in early-stage entrepreneurship as compared to their female counterparts. In India, GEM surveys (including GEM special reports on women) consistently confirm that early-stage entrepreneurial activity is gender-sensitive due to a combination of cultural, societal and economic reasons. GEM India study suggests that early-stage entrepreneurial activity is dominated by men. Indian women starting a business venture more often out of necessity, while a large number of Indian men start businesses with an opportunity motive.
- In India, entrepreneurship motivated by necessity (no other option for work) has reduced to 19%, while 79% respondents are motivated to start enterprises out of opportunity. India is positioned at the top among BRICS economies, excluding Russia.

6.2 Key points from NES (National Experts Survey)

According to the GEM National Experts Survey (NES), the major constraints for entrepreneurship development in India are as follows-

- Lack of funds
- Entrepreneurial education
- Government regulations and complex tax structures
- Culture and social norms

The major enablers are as follows:

- Government Regulations and policy reforms aimed at promoting an enabling entrepreneurship ecosystem.
- Availability of physical and commercial infrastructure: Communication, utilities, transportation, land or space, at a price that does not discriminate against new, small or growing firms as well as the presence of property rights, commercial, accounting and other legal services and institutions that support or promote SMEs.
- Internal market dynamics: The extent to which markets change dramatically from year to year.
- Entrepreneurship education and training: With a visible transformation in entrepreneurship education among universities and Higher Educational Institutions (HEIs), the youth are motivated to choose entrepreneurship as a preferred career.

High-spirited Indian entrepreneurs have left their mark across the globe. They have proved their mettle in facing market imperfections, adversities and charted their own paths of growth. As Leff (1979) puts it *"Entrepreneurship in developing economies is precisely to mobilize factors such as capital and specialized labour, which being imperfectly marketed, might otherwise not be supplied or allocated to the activities where their productivity is greatest".*

In recent years, the Indian economy has shown positive signs of progress and there is significant thrust on promoting entrepreneurship through extension of a wide range of support to entrepreneurs. The results are satisfactory as India has placed itself among the top five countries, with over 10,000 start-ups.[1] It has helped in fulfilling the aspirations of many belonging to Generation 'X' and motivated several from Generation 'Y' to pursue a career in entrepreneurship. However, the entrepreneurship ecosystem is in its evolutionary phase and must reach out to all sections in order to achieve sustainable and inclusive economic growth. Moreover, there is a wide gap in entrepreneurial activities across regions in India, which has to be minimised. In recent times, there has been an increased level of focus

[1] Source: Microsoft Ventures, Zinnov, NASSCOM Start-up India report 2015

on allocating funds for start-ups, making adequate reforms for the ease of doing business, setting up a network of incubators, accelerators and providing mentoring as well as entrepreneurship training. But, these measures are accessible only to a small percentage of entrepreneurs and cannot be made available to millions of aspiring and capable entrepreneurs from villages, small towns or those belonging to less privileged sections of the society. A holistic ecosystem for entrepreneurship development must focus on appropriate platforms of education/training/re-skilling to reorient the mindset of individuals across all segments of the society. For example, participation of women in entrepreneurship is significantly less than that of men. This issue must be addressed for the creation of an equitable society. In addition, ample emphasis must be laid on innovation, creation of socio-economic values towards collaboration and equal access to opportunities. It must not focus only on new entrepreneurs but also towards facilitating the growth of existing start-ups, microenterprises, SMEs and the likes. The ecosystem must facilitate the reorientation of employment seeking people's mindset towards innovation-driven entrepreneurial approach in order to facilitate value creation for their employers. Innovative entrepreneurship requires a strong educational foundation. Human capital is essential for generating creative ideas and can be created through education. Hence, it is important for countries to take another look at their education policies. In this context, there is tremendous need for a collaborative approach between government, industry, educational institutions and the society at large.

As mentioned in Chapter 1, the Entrepreneurial context has three pillars: (1) Entrepreneurial Ecosystem, (2) Availability of Finance and (3) Culture. All of these must be supported by adequate policy frameworks at various levels of the governance. Access to capital must focus beyond access to merely financial capital and also include knowledge capital (R&D institutions, knowledge networks, global partnerships, diaspora and the likes), social capital (expertise-based local communities, collaborative partners across boundaries, knowledge networks and others) and governance capital (co-creation and sharing of value created technology management and the likes).

6.3 Policy Implications

The distinctiveness of entrepreneurship policy as, described by Lundstrom and Stevenson, (2001) for the Organisation for Economic Co-operation and Development (OECD), is based on the notion that such policy is made up of measures intended to directly influence the level of entrepreneurial activity in a region or nation. As mentioned by Reynolds *et al.*, (1994) this influence is evident in policies which

- Encourage economic agents to conceptualise business ideas
- Facilitate the entry of new businesses
- Facilitate the growth of existing businesses
- Facilitate the exit of businesses

There is no universal general policy prescription available, as the countries have their own individual sets of binding constraints and enablers. The importance of a particular factor may be greater in one country when compared with others. Public policies rarely impact entrepreneurial activity in the short run (Acs and Szerb., 2007). Taking cue from Baumol *et al.*'s (2007), there are four primary tenets of entrepreneurial economy- 1) Ease of starting and expanding business, 2) Reward for productive entrepreneurial activity, 3) Disincentives for unproductive activity, and 4) Incentives for successful entrepreneurs to keep their momentum going. Seeing the framework suggested by Baumol, the policy of a country has to be framed appropriately to improve entrepreneurial activity.

In case of India, there is an urgent need for adopting a multi-pronged approach to develop appropriate, cohesive and consistent policies in different areas. This calls for a more refined, segmented study of Indian entrepreneurs, based on their focus, education, innovation content, economic and social strata, stage of existing businesses and others.

The policy should aim at addressing concerns surrounding regulatory entry and barriers to growth, availability of liquidity and capital, labour market, R&D, commercialisation and knowledge spillover, taxation IPR and bankruptcy.

It is also extremely critical that the Entrepreneurship Development Policy is well aligned with initiatives like Make in India, Skill India, Start Up India, Stand Up India and others. The new business creation process occurs across multiple levels of society and is influenced by numerous individual-level factors such as a person's resources, as well as country-level institutions. Thus, the allocation of individual

resources for exploitation of new business opportunities cannot be considered in isolation from the broader institutional context in which such opportunity exploitation takes place.

The study suggests that policymakers should take a targeted approach to stimulate and sustain new business activities by implementing specific policy tools for promotion of new businesses, depending on the individual resource they want to exploit the most. In India, where culture is characterised by high levels of hierarchy and conservatism, the government should focus not only on providing people with easier access to different capital types but also on ensuring that external resources can be combined effectively with the skills and experiences of aspiring entrepreneurs. Otherwise, their knowledge, even if inherently useful for entrepreneurship, may be channelised towards alternative activities that demand less effort and confront less uncertainty.

The government policy needs to introduce major reforms to make the process of doing business in India easy as well as fast. Processing of regulatory applications needs to be improved upon and the business registration process should be made easier and quicker. India needs to move towards a single-window system by adopting a one-stop shop approach. To promote youth and women entrepreneurship, a separate and effective policy needs to be structured.

There is also a need to incentivise private individuals and corporations that provide different types of capital (beyond financial capital) to new ventures.

Entrepreneurial activities in the country are highly dependent upon the quality of education and an ecosystem that promotes innovation. To encourage students to opt for entrepreneurship as their chosen career, the government should introduce entrepreneurship in the teaching curricula at all levels of education. Entrepreneurship education must focus on skill building, innovative thinking and risk taking. It needs to be complemented with strong linkages to the industry, practitioners and other supporting experts and role models. Universities and other HEIs must be encouraged to invest in R&D as well as explore the results of these R&D activities through creation of campus enterprises. This can be further enhanced through linkages with incubation centres, online collaborative platforms for experimenting, testing of new ideas and their piloting, scaling, developing interdisciplinary solutions with design thinking and the likes throughout the country. This would need to be supported by appropriate infrastructure, and forward as well as backward linkages.

The Government policy should aim at minimising regional as well as gender differences in promoting entrepreneurship activities. Promoting women entrepreneurs by offering them incentives can help in strengthening the society and creating equity.

Building an entrepreneurial society is a very complex process and its momentum can be reinforced only through a far-sighted policy. The GEM India team, in collaboration with GEM Global, has embarked on an important initiative that could play a key role in Indian socio-economic development. The team can potentially undertake a more detailed study that could provide added insights into the same. However, this requires expansion of GEM India partnerships and significant support from all the stakeholders.

APPENDIX

Table 1: Ranking of Societal Values of Entrepreneurship by Region, GEM 2015-16

ECONOMY	Entrepreneurship as a Good Career Choice		High status to successful entrepreneurs		Media attention for entrepreneurship	
	Rank/54	Score	Rank/54	Score	Rank/54	Score
Botswana	18	70.1	6	82.0	7	76.2
Burkina Faso	8T	73.8	4	83.4	21	67.3
Cameroon	28	61.1	35	64.8	23	64.5
Egypt	10	73.6	11	79.6	34	58.5
Morocco	17	70.6	45	54.6	41	52.2
Senegal		-		-		-
South Africa	8T	73.8	15	76.1	11	72.2
Tunisia	16	71.1	19	72.1	47	48.3
Total		**70.6**		**73.2**		**62.8**
Australia	36	56.4	21	70.1	10	72.3
China	22	65.9	13	77.6	6	77.2
India	50T	39.3	53	46.6	52	39.4
Indonesia	6	74.4	7	81.4	4	79.4
Iran	37	56.3	5	82.3	35	58.3
Israel	23	64.5	1	86.2	37T	54.8
Kazakhstan	4	76.9	3	83.9	3	80.0
Korea	52	38.0	47	53.5	26	61.5
Lebanon		-		-		-
Malaysia	50T	39.3	50	51.0	24	63.9
Philippines	5	74.6	14	76.2	2	81.5
Taiwan	7	74.0	39	62.7	1	85.6
Thailand	15	71.5	27	69.4	9	72.5
Vietnam	11	73.3	16	75.8	8	73.5
Total		**61.9**		**70.5**		**69.2**
Argentina	25	62.1	48	52.9	22	66.7
Barbados	19T	69.6	23T	69.8	25	61.6
Brazil	3	77.7	9	80.1	15	69.6
Chile	19T	69.6	34	64.9	30	60.4
Colombia	13T	72.3	23T	69.8	12	71.7
Ecuador	26	61.6	32	67.1	5	77.3
Guatemala	1	95.6	10	79.8	29	60.6
Mexico	46	49.3	49	52.0	51	40.5
Panama		-		-		-
Peru	13T	72.3	26	69.7	16T	68.1
Puerto Rico	54	16.7	52	47.6	16T	68.1
Uruguay	32	58.8	43	56.7	32	59.9
Total		**64.1**		**64.6**		**64.0**
Belgium	38	54.2	46	54.5	39	54.7
Bulgaria	34T	57.5	20	71.5	44	49.3
Croatia	27	61.5	54	42.3	48	47.5

ECONOMY	Entrepreneurship as a Good Career Choice		High status to successful entrepreneurs		Media attention for entrepreneurship	
	Rank/54	Score	Rank/54	Score	Rank/54	Score
Estonia	40	53.4	40	62.6	45	49.1
Finland	53	33.2	2	84.9	16T	68.1
Germany	44T	50.8	17	75.7	43	49.8
Greece	29T	60.9	31	67.8	53	38.0
Hungary	43	48.4	8	68.4	19T	33.4
Ireland	47	52.6	30	80.3	54	67.4
Italy	29T	60.9	28	69.0	46	48.5
Latvia	34T	57.5	41	58.2	37T	54.8
Luxembourg	48	44.1	29	68.8	50	44.0
Macedonia	21	67.1	42	57.1	14	71.1
Netherlands	2	79.2	36	64.5	36	57.7
Norway		-		-		-
Poland	31	60.5	44	55.7	42	51.5
Portugal	24	63.4	38	62.9	13	71.6
Romania	12	72.4	18	75.1	19T	67.4
Slovakia	44T	50.8	37	64.2	40	54.0
Slovenia	39	53.7	22	70.0	31	60.3
Spain	41	53.2	51	48.4	49	46.9
Sweden	42	52.7	23T	69.8	27	61.3
Switzerland	49	40.0	33	66.5	33	59.5
United Kingdom	33	57.8	12	79.2	28	61.1
Total		**55.9**		**66.0**		**55.1**
Canada		-		-		-
USA		-		-		-

Table 2:Ranking of Self-perceived Entrepreneurial Opportunities, Capabilities, Failure and Intensions by Region, GEM 2015-16

ECONOMY	Perceived opportunities		Perceived capabilities		Fear of failure		Entrepreneurial intentions	
	Rank/60	Score	Rank/60	Score	Rank/60	Score	Rank/60	Score
Botswana	7	57.8	4	74.1	55	18.9	2	61.9
Burkina Faso	6	58.1	2	78.0	56	17.9	6	45.9
Cameroon	4	60.7	5	73.1	53	23.9	13	33.1
Egypt	27	46.1	46	41.5	45	29.5	11	36.8
Morocco	44	34.3	32	47.6	16	41.1	14	30.2
Senegal	2	69.9	1	89.0	59	15.9	1	66.6
South Africa	35	40.9	38	45.4	44	30.3	44T	10.9
Tunisia	19	48.8	16	59.9	20	40.3	17	28.8
Total		**52.1**		**63.6**		**27.2**		**39.3**
Australia	18	48.9	31	48.2	15	41.7	37	14.4
China	47	31.7	58T	27.4	21	40.0	28	19.5
India	41T	37.8	49	37.8	10	44.0	48	9.2
Indonesia	17	49.9	10T	65.3	22T	39.5	18	27.5
Iran	36T	40.3	12	62.0	27T	38.1	12	35.0
Israel	10	55.5	45	41.6	4T	47.8	25T	21.6
Kazakhstan	20	48.7	24	52.1	1	75.4	29	17.5
Korea	59	14.4	58T	27.4	27T	38.1	56	6.6
Lebanon	29	45.7	7	69.8	58	17.4	7	44.0
Malaysia	49	28.2	57	27.8	49	27.1	57T	5.6
Philippines	12	53.8	8	69.0	29T	36.5	9	37.1
Taiwan	48	30.2	60	25.4	11	43.8	19	26.1
Thailand	34	41.0	36	46.2	7	46.6	31T	16.7
Vietnam	9	56.8	19	56.8	8	45.6	23	22.3
Total		**41.6**		**46.9**		**41.5**		**21.6**
Argentina	28	45.9	13	61.6	50	25.8	15	29.1
Barbados	11	55.0	3	75.0	60	14.7	25T	21.6
Brazil	31	42.4	18	58.3	9	44.7	21	24.4
Chile	8	57.4	9	65.7	48	28.1	3	50.0
Colombia	5	58.3	17	59.5	39T	33.2	4	48.2
Ecuador	14	52.7	6	72.2	47	28.6	5	46.3
Guatemala	24	47.9	15	60.0	43	31.0	10	36.9
Mexico	30	44.7	37	45.8	31	36.4	39	13.7
Panama	26	46.5	27	49.4	54	23.1	38	13.9
Peru	15T	51.4	10T	65.3	51	25.5	8	38.6
Puerto Rico	55	25.0	26	50.4	57	17.7	43	11.1
Uruguay	39	39.2	14	61.0	52	24.4	20	25.4
Total		**47.2**		**60.4**		**27.8**		**29.9**
Belgium	36T	40.3	54	31.9	3	48.5	44T	10.9
Bulgaria	58	15.8	53	35.2	38	33.3	59	5.3
Croatia	56	22.3	33	47.5	33	34.4	30	17.2

ECONOMY	Perceived opportunities		Perceived capabilities		Fear of failure		Entrepreneurial intentions	
	Rank/60	Score	Rank/60	Score	Rank/60	Score	Rank/60	Score
Estonia	15T	51.4	41T	44.0	24	39.3	31T	16.7
Finland	21	48.6	50	37.4	41	32.6	44T	10.9
Germany	40	38.3	52	36.2	13	42.3	54	7.2
Greece	60	14.2	34	46.8	6	46.9	51	8.3
Hungary	38	25.3	40	38.7	17	41.8	35	14.8
Ireland	54	39.4	48	45.0	14	40.9	36	14.6
Italy	53	25.7	56	30.5	2	57.5	52T	8.2
Latvia	43	34.7	28	49.1	26	38.6	24	22.2
Luxembourg	23	48.2	41T	44.0	12	42.6	40	13.5
Macedonia	41T	37.8	22	54.4	34	34.3	22	23.3
Netherlands	22	48.4	47	40.6	39T	33.2	47	9.4
Norway	3	68.9	55	30.8	37	33.4	60	4.8
Poland	46	32.9	20	55.9	4T	47.8	27	20.0
Portugal	50	28.1	29	48.9	18	40.8	33	16.2
Romania	45	33.3	35	46.3	19	40.5	16	29.0
Slovakia	51	26.4	23	52.4	36	33.7	34	15.7
Slovenia	57	20.5	30	48.6	42	32.4	49	9.1
Spain	52	26.0	39	45.3	25	39.2	57T	5.6
Sweden	1	70.2	51	36.7	29T	36.5	50	8.4
Switzerland	32	41.8	41T	44.0	35	33.8	55	7.0
United Kingdom	33	41.6	44	43.6	32	34.9	52T	8.2
Total		**36.7**		**43.1**		**39.1**		**12.8**
Canada	13	53.2	25	50.5	22T	39.5	42	11.6
USA	25	46.6	21	55.7	46	29.4	41	12.4
Total		**49.9**		**53.1**		**34.4**		**12.0**

Table 3: Ranking of Six Stages of Entrepreneurial Activity by Region, GEM 2015-16

ECONOMY	Nascent entrepreneurship rate		New business ownership rate		Early-stage entrepreneurial activity (TEA)		EEA		Established business ownership rate		Discontinuation of businesses (% of TEA)	
	Rank/60	Score	Rank/60	Score	Rank/60	Score	Rank/60	Score	Rank/60	Score	Rank/60	Score
Botswana	3	23.0	6	11.9	3	33.2	35	1.6	47	4.6	1	14.7
Burkina Faso	4	19.7	7	11.2	5	29.8	51T	0.6	1	27.8	9	8.1
Cameroon	6T	16.5	10	10.0	7	25.4	48T	0.7	12	12.8	5	9.0
Egypt	46T	4.0	37T	3.4	43	7.4	38	1.3	56	2.9	14	6.6
Morocco	58	1.3	40T	3.2	58	4.4	55T	0.4	41T	5.2	46T	2.2
Senegal	2	24.9	2	15.0	1	38.6	29T	2.3	5	18.8	2	13.3
South Africa	35	5.5	32T	3.8	38T	9.2	57T	0.3	53	3.4	19	4.8
Tunisia	36	5.4	25T	4.9	33	10.1	34	1.9	44	5.0	10T	7.2
Total		**12.5**		**7.9**		**19.8**		**1.1**		**10.1**		**8.3**
Australia	24	7.3	20	5.8	24T	12.8	2	8.5	20	8.7	22	4.5
China	26	6.8	17T	6.3	24T	12.8	36T	1.4	55	3.1	39T	2.7
India	22	7.7	40T	3.2	30T	10.8	57T	0.3	38	5.5	43T	2.3
Indonesia	31T	6.1	5	12.1	13T	17.7	60	0.2	8	17.1	27T	3.7
Iran	21	7.9	22	5.3	23	12.9	43T	1.0	10	14.0	12T	6.7
Israel	18	8.4	34	3.7	28	11.8	6T	6.5	51	3.9	21	4.6
Kazakhstan	20	8.0	40T	3.2	29	11.0	46T	0.9	58	2.4	35T	3.1
Korea	40	5.0	29	4.3	36T	9.3	27T	2.4	28T	7.0	49T	2.0
Lebanon	12T	10.8	1	20.4	4	30.1	25T	3.3	6	18.0	4	10.6
Malaysia	60	0.8	55	2.3	60	2.9	57T	0.3	45T	4.8	59	1.1
Philippines	23	7.6	9	10.1	16	17.2	29T	2.3	26T	7.3	3	12.2
Taiwan	54	2.5	27	4.8	44T	7.3	20T	4.1	16T	9.6	25T	3.8
Thailand	43T	4.5	13	9.5	20T	13.7	48T	0.7	2	24.6	30T	3.4
Vietnam	59	1.0	4	12.7	20T	13.7	51T	0.6	3	19.6	27T	3.7
Total		**6.0**		**7.4**		**13.1**		**2.3**		**10.4**		**4.6**
Argentina	10	11.7	17T	6.3	13T	17.7	27T	2.4	18	9.5	16	6.3
Barbados	11	11.5	8	10.7	10T	21.0	41T	1.1	9	14.1	25T	3.8
Brazil	27	6.7	3	14.9	10T	21.0	43T	1.0	4	18.9	12T	6.7
Chile	6T	16.5	11T	9.8	6	25.9	15	5.2	21	8.2	7	8.5
Colombia	9	15.6	16	7.5	8	22.7	29T	2.3	41T	5.2	10T	7.2
Ecuador	1	25.9	11T	9.8	2	33.6	46T	0.9	7	17.4	8	8.3
Guatemala	12T	10.8	15	7.6	13T	17.7	39T	1.2	22	8.1	24	4.0
Mexico	8	16.2	24	5.0	10T	21.0	39T	1.2	30	6.9	15	6.4
Panama	38	5.2	14	7.7	24T	12.8	54	0.5	49T	4.2	46T	2.2
Peru	5	17.8	25T	4.9	9	22.2	48T	0.7	31	6.6	6	8.8
Puerto Rico	28	6.6	57T	1.9	40	8.5	51T	0.6	60	1.4	60	0.9
Uruguay	14	10.6	32T	3.8	18	14.3	19	4.2	59	2.1	20	4.7
Total		**12.9**		**7.5**		**19.9**		**1.8**		**8.5**		**5.7**
Belgium	43T	4.5	56	2.0	51	6.2	12	6.1	52	3.8	51T	1.9

ECONOMY	Nascent entrepreneurship rate		New business ownership rate		Early-stage entrepreneurial activity (TEA)		EEA		Established business ownership rate		Discontinuation of businesses (% of TEA)	
	Rank/60	Score	Rank/60	Score	Rank/60	Score	Rank/60	Score	Rank/60	Score	Rank/60	Score
Bulgaria	57	2.0	60	1.5	59	3.5	55T	0.4	39	5.4	58	1.4
Croatia	39	5.1	53T	2.6	42	7.7	16	4.9	57	2.8	37	2.9
Estonia	16	8.7	28	4.7	22	13.1	10T	6.3	23T	7.7	49T	2.0
Finland	46T	4.0	48T	2.8	50	6.6	13	5.8	14	10.2	39T	2.7
Germany	53	2.8	57T	1.9	57	4.7	18	4.5	45T	4.8	53T	1.8
Greece	49	3.9	48T	2.8	49	6.7	43T	1.0	11	13.1	30T	3.4
Hungary	29T	5.3	45T	2.7	36T	7.9	5	2.1	32T	6.5	35T	2.8
Ireland	37	6.5	52	3.0	41	9.3	33	6.6	37	5.6	38	3.1
Italy	50T	3.2	59	1.7	56	4.9	36T	1.4	48	4.5	51T	1.9
Latvia	17	8.6	19	6.0	19	14.1	25T	3.3	16T	9.6	30T	3.4
Luxembourg	25	7.1	40T	3.2	32	10.2	8T	6.4	54	3.3	23	4.2
Macedonia	52	3.0	44	3.1	52	6.1	29T	2.3	34T	5.9	43T	2.3
Netherlands	45	4.3	45T	3.0	46T	7.2	10T	6.3	15	9.9	48	2.1
Norway	55	2.3	39	3.3	54T	5.7	1	9.9	32T	6.5	56T	1.6
Poland	33	5.7	36	3.5	38T	9.2	22T	4.0	34T	5.9	39T	2.7
Portugal	34	5.6	30T	4.0	35	9.5	22T	4.0	28T	7.0	34	3.2
Romania	31T	6.1	23	5.1	30T	10.8	17	4.6	25	7.5	33	3.3
Slovakia	29T	6.5	37T	3.4	34	9.6	24	3.6	36	5.7	17	5.4
Slovenia	50T	3.2	48T	2.8	53	5.9	14	5.6	49T	4.2	53T	1.8
Spain	56	2.1	35	3.6	54T	5.7	41T	1.1	23T	7.7	56T	1.6
Sweden	41	4.8	53T	2.6	46T	7.2	8T	6.4	41T	5.2	39T	2.7
Switzerland	42	4.6	48T	2.8	44T	7.3	6T	6.5	13	11.3	55	1.7
United Kingdom	46T	4.0	47	2.9	48	6.9	20T	4.1	40	5.3	43T	2.3
Total		**4.8**		**3.1**		**7.8**		**4.5**		**6.6**		**2.6**
Canada	15	9.7	21	5.5	17	14.7	3	7.1	19	8.8	18	5.0
USA	19	8.3	30T	4.0	27	11.9	4	7.0	26T	7.3	29	3.6
Total		**9.0**		**4.8**		**13.3**		**7.0**		**8.1**		**4.3**

Table 4:Ranking of Entrepreneurial Motivations for TEA by Region, GEM 2015-16

ECONOMY	Early-stage entrepreneurial activity (TEA)		Necessity-driven (% of TEA)		Opportunity-driven (% of TEA)		Improvement-driven opportunity (% of TEA)		Motivational index*	
	Rank/60	Score	Rank/60	Score	Rank/60	Score	Rank/60	Score	Rank/60	Score
Botswana	3	33.2	8	35.6	53	61.9	31	50.1	46T	1.4
Burkina Faso	5	29.8	20T	27.5	35	72.0	49	37.3	46T	1.4
Cameroon	7	25.4	15T	29.8	51	64.1	47T	37.5	48	1.3
Egypt	43	7.4	5	42.4	56	57.3	55	33.5	59	0.8
Morocco	58	4.4	18	28.4	40	69.2	38	43.2	42T	1.5
Senegal	1	38.6	25	27.1	36	71.8	25	51.9	28T	1.9
South Africa	38T	9.2	12	33.2	48	65.7	47T	37.5	50T	1.1
Tunisia	33	10.1	43	18.0	20	79.3	9	64.1	16	3.6
Total		**19.8**		**30.2**		**67.7**		**44.4**		**1.6**
Australia	24T	12.8	55	12.7	4T	85.1	5	66.0	5	5.2
China	24T	12.8	9	34.7	50	64.3	45	38.9	50T	1.1
India	30T	10.8	39T	18.9	22	78.7	54	34.3	31T	1.8
Indonesia	13T	17.7	38	19.0	16	80.3	50	36.5	28T	1.9
Iran	23	12.9	17	28.8	44	67.5	32	48.5	33T	1.7
Israel	28	11.8	56	12.4	19	79.4	41T	40.9	17	3.3
Kazakhstan	29	11.0	20T	27.5	41	68.9	60	24.0	55T	0.9
Korea	37	9.3	32	24.4	26	74.6	11	62.1	21	2.6
Lebanon	4	30.1	24	27.4	34	72.3	14	57.3	25T	2.1
Malaysia	60	2.9	52T	13.7	1	86.3	3	67.0	6	4.9
Philippines	16	17.2	26	25.6	29T	73.7	39	41.6	38T	1.6
Taiwan	44T	7.3	49	14.9	4T	85.1	16T	56.5	13	3.8
Thailand	20T	13.7	44	17.2	10	81.2	1	75.9	9	4.4
Vietnam	20T	13.7	7	37.4	52	62.6	13	57.9	42T	1.5
Total		**13.1**		**22.5**		**75.7**		**50.5**		**2.6**
Argentina	13T	17.7	15T	29.8	45T	67.4	29	50.7	33T	1.7
Barbados	10T	21.0	47	15.2	12	80.8	16T	56.5	14T	3.7
Brazil	10T	21.0	4	42.9	57	56.5	33	47.8	50T	1.1
Chile	6	25.9	27	25.3	45T	67.4	12	61.2	22	2.4
Colombia	8	22.7	11	33.3	49	65.6	16T	56.5	33T	1.7
Ecuador	2	33.6	14	30.6	42	68.8	52	34.6	50T	1.1
Guatemala	13T	17.7	2	45.8	58	53.5	43	40.8	55T	0.9
Mexico	10T	21.0	39T	18.9	21	78.9	20	55.5	20	2.9
Panama	24T	12.8	3	45.3	59	52.0	44	39.1	55T	0.9
Peru	9	22.2	28	25.2	33	72.9	22	53.6	25T	2.1
Puerto Rico	40	8.5	29	25.1	29T	73.7	40	41.4	38T	1.6
Uruguay	18	14.3	42	18.2	13	80.6	21	53.7	18T	3.0
Total		**19.9**		**29.6**		**68.2**		**49.3**		**1.9**
Belgium	51	6.2	20T	27.5	54	60.2	37	44.3	38T	1.6
Bulgaria	59	3.5	10	33.4	47	66.6	58	29.0	55T	0.9

ECONOMY	Early-stage entrepreneurial activity (TEA)		Necessity-driven (% of TEA)		Opportunity-driven (% of TEA)		Improvement-driven opportunity (% of TEA)		Motivational index*	
	Rank/60	Score	Rank/60	Score	Rank/60	Score	Rank/60	Score	Rank/60	Score
Croatia	42	7.7	6	40.1	55	59.2	41T	40.9	54	1.0
Estonia	22	13.1	52T	13.7	6	84.8	15	57.0	10T	4.2
Finland	50	6.6	48	15.0	15	80.4	10	63.0	10T	4.2
Germany	57	4.7	45T	17.1	17	80.2	8	64.2	14T	3.7
Greece	49	6.7	36	22.3	24	75.4	53	34.4	42T	1.5
Hungary	41	7.9	35	23.2	18	71.6	30	50.5	23	2.2
Ireland	37	9.3	37	19.3	37	79.8	46	38.5	27	2.0
Italy	56	4.9	41	18.7	25	74.7	57	30.0	38T	1.6
Latvia	19	14.1	45T	17.1	14	80.5	26	51.4	18T	3.0
Luxembourg	32	10.2	59	9.3	2	86.2	24	52.2	4	5.6
Macedonia	52	6.1	1	52.1	60	42.1	59	26.7	60	0.5
Netherlands	46T	7.2	50	14.7	8	81.8	7	65.3	8	4.5
Norway	54T	5.7	57	10.6	9	81.5	4	66.4	2	6.3
Poland	38T	9.2	19	28.1	38T	69.3	34	46.4	33T	1.7
Portugal	35	9.5	31	24.5	28	73.8	51	35.9	42T	1.5
Romania	30T	10.8	20T	27.5	38T	69.3	56	33.2	49	1.2
Slovakia	34	9.6	13	31.1	43	68.4	27	51.3	33T	1.7
Slovenia	53	5.9	34	23.7	32	73.0	35	44.9	28T	1.9
Spain	54T	5.7	30	24.8	31	73.5	36	44.5	31T	1.8
Sweden	46T	7.2	60	9.2	23	76.7	23	52.6	3	5.7
Switzerland	44T	7.3	58	10.1	3	85.4	6	65.8	1	6.5
United Kingdom	48	6.9	33	23.9	27	74.3	28	51.2	25T	2.1
Total		**7.8**		**22.4**		**73.7**		**47.5**		**2.8**
Canada	17	14.7	54	13.5	11	81.1	19	55.9	12	4.1
USA	27	11.9	51	14.3	7	82.2	2	69.0	7	4.8
Total		**13.3**		**13.9**		**81.7**		**62.5**		**4.5**

Table 5:Ranking of Gender Distribution of TEA, Necessity TEA & Opportunity TEA by Region, GEM 2015-16

ECONOMY	MALE TEA (% of adult male population)		FEMALE TEA (% of adult female population)		MALE TEA Opportunity (% of TEA males)		FEMALE TEA Opportunity (% of TEA females)		MALE TEA Necessity (% of TEA males)		FEMALE TEA Necessity (% of TEA females)	
	Rank/60	Score	Rank/60	Score	Rank/60	Score	Rank/60	Score	Rank/60	Score	Rank/60	Score
Botswana	2	36.6	3	30.1	47	68.6	53	54.3	14T	28.2	7	44.0
Burkina Faso	5	33.6	4	26.6	26T	77.5	39	66.5	29	22.0	18	33.0
Cameroon	7	27.2	6	23.6	52	67.1	48	61.0	17	27.2	20	32.5
Egypt	39	11.1	52	3.7	56T	61.3	57	45.0	4	38.3	3	55.0
Morocco	57T	6.1	60	2.8	43	70.9	42	65.5	20T	25.4	15	34.5
Senegal	1	40.5	1	36.8	17	80.5	46	62.9	39	18.0	12	36.2
South Africa	36T	11.6	35	7.0	48	68.0	47	62.2	10T	30.2	9	37.8
Tunisia	23	15.0	43	5.3	16	80.8	22	75.1	41	16.9	41T	21.1
Total		**22.7**		**17.0**		**71.8**		**61.6**		**25.8**		**36.8**
Australia	21	15.5	22T	10.1	2T	87.3	10T	81.7	57	10.6	48	16.0
China	22	15.3	21	10.2	56T	61.3	33T	69.0	5	37.8	25T	29.8
India	28	13.6	31	7.9	29	76.9	8T	82.1	31T	20.9	50	15.3
Indonesia	17	17.6	14	17.8	11	82.8	16	77.8	43	16.6	38	21.3
Iran	18	17.5	30	8.5	49T	67.6	38	67.4	12	29.1	29	28.2
Israel	26	14.4	26	9.3	21	78.8	12	80.4	50	12.8	53	11.9
Kazakhstan	35	12.0	22T	10.1	45	70.0	36	67.7	18T	26.3	28	28.9
Korea	41	10.7	32	7.7	35	74.3	23T	75.0	22	24.8	35	23.7
Lebanon	3	35.7	5	24.6	33	75.3	35	68.0	23	24.7	22	31.2
Malaysia	60	2.9	57	3.0	5	86.2	4	86.4	49	13.8	51	13.6
Philippines	24	14.9	11	19.5	19	79.5	32	69.3	34	20.2	25T	29.8
Taiwan	44T	9.7	47	4.9	1	87.7	14	79.7	53	12.3	43	20.3
Thailand	32	12.7	17	14.8	6	85.7	17T	77.5	51T	12.5	41T	21.1
Vietnam	36T	11.6	16	15.5	40T	71.7	52	56.3	13	28.3	8	43.8
Total		**14.6**		**11.7**		**77.5**		**74.2**		**20.8**		**23.9**
Argentina	15	19.9	15	15.8	37	73.2	49	60.7	25T	23.3	11	37.3
Barbados	10	22.4	10	19.8	8	84.6	20	76.7	55T	11.2	44	19.5
Brazil	13	21.6	9	20.3	51	67.2	56	45.3	9	32.0	4	54.2
Chile	6	29.7	8	22.1	34	75.0	51	57.2	37	18.8	16	34.0
Colombia	8	27.1	13	18.5	53	66.5	43	64.3	8	32.1	14	34.9
Ecuador	4	34.3	2	32.8	40T	71.7	40	65.8	16	27.7	17	33.5
Guatemala	11T	21.9	18	13.9	58	60.5	59	43.4	3	38.7	2	56.0
Mexico	9	23.0	12	19.2	13T	82.4	23T	75.0	46	15.6	37	22.5
Panama	29	13.5	20	12.1	59	52.6	55	51.2	2	44.4	5	46.3
Peru	11T	21.9	7	22.5	23	78.6	37	67.6	33	20.6	27	29.6
Puerto Rico	43	10.0	34	7.1	30T	75.9	30	71.0	28	23.1	30	27.6
Uruguay	14	20.1	28	9.1	13T	82.4	19	77.1	45	15.8	36	22.9
Total		**22.1**		**17.8**		**72.6**		**62.9**		**25.3**		**34.9**
Belgium	52T	7.5	45T	5.0	44	70.5	58	44.6	31T	20.9	10	37.5
Bulgaria	59	4.0	58T	2.9	54	64.8	33T	69.0	7	35.2	23	31.0

ECONOMY	MALE TEA (% of adult male population)		FEMALE TEA (% of adult female population)		MALE TEA Opportunity (% of TEA males)		FEMALE TEA Opportunity (% of TEA females)		MALE TEA Necessity (% of TEA males)		FEMALE TEA Necessity (% of TEA females)	
	Rank/60	Score	Rank/60	Score	Rank/60	Score	Rank/60	Score	Rank/60	Score	Rank/60	Score
Croatia	44T	9.7	41	5.7	55	62.3	54	53.9	6	36.5	6	46.1
Estonia	19	16.6	25	9.7	10	83.6	3	86.7	47	15.2	56	11.2
Finland	49	8.9	50	4.2	9	84.5	29	71.6	54	12.2	39T	21.2
Germany	57T	6.1	55T	3.3	12	82.5	21	76.1	44	16.0	45	19.3
Greece	52T	7.5	38T	6.0	26T	77.5	26	72.6	30	21.1	34	23.8
Hungary	30T	10.4	40	5.5	22	78.7	2	58.6	24	19.4	24	30.3
Ireland	42	13.0	42	5.8	30T	75.9	50	88.3	36	24.1	59	8.8
Italy	55	6.9	58T	2.9	42	71.5	8T	82.1	35	20.0	49	15.6
Latvia	16	18.6	24	9.8	15	80.9	13	79.8	40	17.0	46	17.4
Luxembourg	36T	11.6	29	8.7	4	87.0	6	85.1	60	7.6	55	11.6
Macedonia	50	8.6	53T	3.5	60	42.6	60	41.0	1	50.2	1	56.7
Netherlands	40	10.9	53T	3.5	24	78.5	1	92.1	42	16.8	60	7.9
Norway	52T	7.5	51	3.8	20	79.0	5	86.3	55T	11.2	58	9.5
Poland	33	12.5	38T	6.0	38T	72.1	45	63.5	18T	26.3	21	31.6
Portugal	34	12.4	36	6.7	18	79.6	44	63.7	38	18.4	13	35.1
Romania	27	14.2	33	7.5	49T	67.6	27	72.4	14T	28.2	32	26.4
Slovakia	30T	13.0	37	6.5	46	69.8	41	65.7	10T	30.2	19	32.8
Slovenia	51	8.4	55T	3.3	36	73.3	28	72.0	27	23.2	33	24.9
Spain	56	6.4	45T	5.0	32	75.8	31	70.6	25T	23.3	31	26.7
Sweden	47	9.4	48T	4.8	26T	77.5	25	74.9	58	8.8	57	10.1
Switzerland	46	9.5	44	5.1	2T	87.3	10T	81.7	59	8.4	52	13.2
United Kingdom	48	9.1	48T	4.8	38T	72.1	15	78.4	20T	25.4	39T	21.2
Total		**10.1**		**5.4**		**74.8**		**72.1**		**21.5**		**23.7**
Canada	20	16.0	19	13.5	25	78.4	7	84.3	48	15.1	54	11.7
USA	25	14.6	27	9.2	7	85.3	17T	77.5	51T	12.5	47	17.2
Total		**15.3**		**11.3**		**81.8**		**80.9**		**13.8**		**14.4**

Table 6: Ranking of TEA by Age Group. by Region, GEM 2015-16

ECONOMY	18 – 24 years		25 -34 years		35 – 44 years		45 -54 years		55 -64 years	
	Rank/60	Score	Rank/60	Score	Rank/60	Score	Rank/60	Score	Rank/60	Score
Botswana	4	25.7	2	40.8	2	36.8	3	33.7	2	26.0
Burkina Faso	1T	27.9	4	35.4	5T	30.7	7	24.9	5	21.4
Cameroon	10	19.2	7	29.0	7	29.2	5	27.5	7	19.1
Egypt	44	6.0	44T	9.7	46	8.8	49	5.9	41T	4.6
Morocco	55T	2.9	57	6.1	55	6.6	59	2.9	58	1.3
Senegal	5	25.4	1	45.3	1	46.2	1	45.6	1	32.5
South Africa	43	6.3	40	10.9	31	12.3	37T	8.0	29	6.8
Tunisia	42	6.5	27	14.9	38	10.1	27T	10.6	43T	4.4
Total		**15.0**		**24.0**		**22.6**		**19.9**		**14.5**
Australia	25T	10.2	26	15.3	22T	16.4	20	13.2	28	7.0
China	24	10.9	22	17.7	24	16.3	22	12.6	35	5.8
India	34	8.7	37	11.5	32	12.2	24	12.1	20T	9.3
Indonesia	15	14.9	16	21.2	15T	19.2	17	15.0	12	13.7
Iran	21T	12.1	24	16.3	28	14.2	33	9.5	30	6.4
Israel	37	7.7	29T	13.8	26	15.7	26	10.7	18T	9.5
Kazakhstan	27T	10.1	25	15.9	49	8.2	27T	10.6	24T	7.6
Korea	59	2.2	58	4.6	44T	8.9	16	15.7	15	11.5
Lebanon	3	26.7	5	31.9	4	35.2	4	31.4	4	25.6
Malaysia	58	2.3	60	3.3	60	3.5	60	2.7	54	2.6
Philippines	35	8.6	18	18.6	13	21.1	9	21.1	8	17.9
Taiwan	27T	10.1	36	12.0	51	7.7	56	4.2	51	3.3
Thailand	31T	9.0	20	18.0	20T	16.7	25	11.5	20T	9.3
Vietnam	19	12.8	21	17.8	22T	16.4	37T	8.0	23	8.4
Total		**10.4**		**15.6**		**15.1**		**12.7**		**9.9**
Argentina	17	14.6	13	23.3	14	20.9	14	17.1	22	9.2
Barbados	7	21.9	8	27.5	10	24.3	11	19.1	16	9.9
Brazil	8	20.8	10	26.2	11	22.7	13	17.3	13	13.2
Chile	12	17.2	6	30.8	5T	30.7	6	26.2	6	21.0
Colombia	9	20.3	12	23.9	8	27.5	8	23.2	9	15.5
Ecuador	1T	27.9	3	38.9	3	35.5	2	35.1	3	25.8
Guatemala	13	16.4	17	21.0	17	18.1	15	16.3	14	11.9
Mexico	20	12.7	9	26.8	9	25.6	10	20.2	11	14.7
Panama	29T	9.9	28	14.2	27	14.5	19	13.6	17	9.8
Peru	6	23.9	11	25.6	12	22.1	12	18.5	10	15.2
Puerto Rico	40T	6.7	38T	11.4	35T	10.6	35	8.6	45	4.3
Uruguay	23	11.6	19	18.4	15T	19.2	21	13.1	31T	6.2
Total		**17.0**		**24.0**		**22.6**		**19.0**		**13.1**
Belgium	52T	3.4	43	9.9	43	9.0	53T	5.0	53	2.9
Bulgaria	50	4.4	59	3.8	59	4.9	58	3.8	59	0.9
Croatia	36	8.0	41	10.8	37	10.5	47	6.4	52	3.0

ECONOMY	18 – 24 years		25 -34 years		35 – 44 years		45 -54 years		55 -64 years	
	Rank/60	Score	Rank/60	Score	Rank/60	Score	Rank/60	Score	Rank/60	Score
Estonia	16	14.7	15	21.5	19	17.1	43T	7.3	41T	4.6
Finland	48	5.2	49	8.6	39T	9.7	52	5.2	43T	4.4
Germany	49	4.6	56	6.3	58	5.0	50	5.4	56T	2.0
Greece	55T	2.9	51T	7.3	53	6.9	31	9.9	36	5.7
Hungary	31T	6.7	42	10.3	41	9.2	23	7.8	24T	5.0
Ireland	40T	9.0	50	8.4	42	9.1	41	12.5	39	7.6
Italy	45	5.9	55	6.8	57	5.1	57	3.9	50	3.4
Latvia	14	16.0	14	22.3	18	17.6	32	9.6	46T	4.2
Luxembourg	31T	9.0	35	12.1	33T	11.4	30	10.0	27	7.2
Macedonia	47	5.3	47	9.1	47	8.7	51	5.3	60	0.7
Netherlands	39	7.3	44T	9.7	50	7.8	45	7.2	46T	4.2
Norway	60	0.0	51T	7.3	56	6.4	42	7.6	38	5.2
Poland	29T	9.9	32	13.1	35T	10.6	36	8.3	48	3.9
Portugal	38	7.5	34	12.2	33T	11.4	34	9.0	33T	6.0
Romania	18	14.2	31	13.6	29	14.0	48	6.0	31T	6.2
Slovakia	21T	12.1	33	12.7	30	12.8	43T	7.3	49	3.5
Slovenia	57	2.8	38T	11.4	54	6.8	53T	5.0	56T	2.0
Spain	52T	3.4	54	7.1	48	8.4	53T	5.0	55	2.2
Sweden	46	5.6	46	9.3	52	7.3	46	7.0	33T	6.0
Switzerland	54	3.1	48	8.8	39T	9.7	39T	7.9	40	4.9
United Kingdom	51	3.9	51T	7.3	44T	8.9	39T	7.9	37	5.4
Total		**6.9**		**10.4**		**9.5**		**7.1**		**4.2**
Canada	11	18.2	23	16.6	25	15.8	18	14.5	18T	9.5
USA	25T	10.2	29T	13.8	20T	16.7	27T	10.6	26	7.4
Total		**14.2**		**15.2**		**16.3**		**12.5**		**8.4**

Table 7:Ranking of Job Creation Expectations of TEA by Region, 2015-16

ECONOMY	0 jobs in 5 years (% TEA)		1 – 5 jobs in 5 years (% TEA)		6 or more jobs in 5 years (% TEA)	
	Rank/60	Score	Rank/60	Score	Rank/60	Score
Botswana	53	26.2	17	42.2	9T	31.7
Burkina Faso	60	5.6	1	81.4	41	13.0
Cameroon	12T	52.1	39	34.5	40	13.3
Egypt	14	51.4	58	22.8	19T	25.7
Morocco	24	45.5	27	38.0	35	16.5
Senegal	46	32.0	11	45.3	23	22.7
South Africa	51	29.8	13	44.5	19T	25.7
Tunisia	58	19.0	18	40.9	3	40.1
Total		**32.7**		**43.7**		**23.6**
Australia	50	31.0	20T	39.9	15	29.1
China	44	32.4	44	32.6	5	35.0
India	6	59.9	30	36.6	58	3.5
Indonesia	5	60.7	31T	36.2	59	3.1
Iran	10	54.3	56	25.1	27	20.6
Israel	21	47.0	48	29.4	22	23.6
Kazakhstan	29	41.0	57	24.7	6	34.4
Korea	39	37.9	10	46.5	39	15.6
Lebanon	28	41.9	9	47.0	45	11.2
Malaysia	33	40.1	6	51.4	53	8.6
Philippines	30T	40.5	8	49.3	46	10.2
Taiwan	47	31.9	55	26.3	2	41.8
Thailand	2	68.9	59	22.4	51	8.8
Vietnam	19T	48.0	16	42.5	49	9.5
Total		**45.4**		**36.4**		**18.2**
Argentina	40	37.0	14	44.2	32	18.8
Barbados	23	45.6	15	42.6	43	11.8
Brazil	7T	57.0	31T	36.2	55	6.8
Chile	56	21.1	12	45.2	7	33.6
Colombia	59	11.3	40	34.3	1	54.3
Ecuador	54	26.1	3	64.7	50	9.3
Guatemala	57	19.2	2	68.9	42	11.9
Mexico	16T	50.3	22T	39.6	47	10.1
Panama	19T	48.0	7	50.0	60	2.0
Peru	49	31.1	5	52.9	37	16.0
Puerto Rico	42	33.1	4	57.1	48	9.8
Uruguay	41	35.7	26	38.4	18	25.9
Total		**34.6**		**47.8**		**17.5**
Belgium	25	44.6	33	35.9	29	19.5
Bulgaria	1	72.4	60	20.3	54	7.3
Croatia	52	29.6	20T	39.9	13	30.4

ECONOMY	0 jobs in 5 years (% TEA)		1 – 5 jobs in 5 years (% TEA)		6 or more jobs in 5 years (% TEA)	
	Rank/60	Score	Rank/60	Score	Rank/60	Score
Estonia	45	32.3	28	37.6	14	30.0
Finland	26	43.1	25	38.7	33	18.2
Germany	36	39.4	22T	39.6	25T	21.0
Greece	4	63.7	45T	31.9	57	4.3
Hungary	35	39.9	36	28.6	11T	31.4
Ireland	48	31.5	52	35.5	8	33.0
Italy	3	66.0	51	28.9	56	5.0
Latvia	37	39.2	49	29.3	11T	31.4
Luxembourg	11	53.7	37	35.0	44	11.3
Macedonia	30T	40.5	29	37.3	24	22.2
Netherlands	15	50.7	53	28.3	25T	21.0
Norway	7T	57.0	54	27.2	38	15.8
Poland	32	40.2	41	33.7	17	26.1
Portugal	27	42.7	19	40.2	34	17.1
Romania	55	25.6	38	34.7	4	39.8
Slovakia	38	38.3	42	33.2	16	28.5
Slovenia	22	46.5	43	33.1	28	20.5
Spain	12T	52.1	24	39.2	52	8.7
Sweden	9	54.9	50	29.0	36	16.1
Switzerland	18	48.8	45T	31.9	30	19.3
United Kingdom	16T	50.3	47	30.8	31	19.0
Total		**46.0**		**33.3**		**20.7**
Canada	34	40.0	34T	35.8	21	24.2
USA	43	32.5	34T	35.8	9T	31.7
Total		**36.2**		**35.8**		**28.0**

Table 8: Entrepreneurial framework conditions, by region, 2015-16 (Weighted average: 1 = highly insufficient, 9 = highly sufficient)

Economy	Stage	1	2a	2b	3	4a	4b	5	6	7a	7b	8	9
Botswana	2	4.1	4.2	4.1	4.1	4.2	4.9	3.8	4.2	4.9	3.5	5.0	4.7
Burkina Faso	1	3.6	3.7	4.7	4.0	1.9	4.6	2.9	4.9	4.4	3.8	4.8	4.7
Cameroon	1	3.6	4.5	3.8	4.4	3.0	4.7	3.6	5.2	4.1	4.0	5.1	4.7
Egypt	3	3.5	3.3	3.1	3.3	1.6	3.1	2.9	4.2	5.1	3.8	6.3	3.8
Morocco	3	4.3	3.6	3.6	3.8	1.8	3.3	3.1	5.0	4.7	3.7	7.0	3.7
Senegal	1	3.6	4.1	4.9	4.1	1.8	3.9	2.4	5.3	3.3	3.9	6.4	3.8
South Africa	3	4.0	4.1	3.1	3.0	3.1	4.2	3.4	4.9	4.5	3.9	5.9	3.4
Tunisia	3	4.2	4.1	2.7	3.6	1.7	3.4	2.8	5.8	6.9	2.9	6.7	4.1
Africa		**3.8**	**3.9**	**3.7**	**3.8**	**2.4**	**4.0**	**3.1**	**4.9**	**4.7**	**3.7**	**5.9**	**4.1**
Australia	5	4.0	3.7	4.2	4.2	3.7	4.2	3.7	5.1	4.7	4.7	6.5	4.8
China	3	4.9	5.8	4.4	4.4	2.6	5.0	4.1	4.3	7.2	4.3	6.9	5.0
India	1	5.7	5.5	3.9	4.5	4.1	5.1	4.3	5.0	5.7	4.8	6.2	5.5
Indonesia	3	4.9	5.1	4.4	4.8	4.4	5.9	4.9	4.8	6.2	4.6	5.2	5.8
Iran	2	3.3	3.8	3.3	2.1	2.8	3.4	3.0	2.8	5.9	3.1	6.6	3.7
Israel	5	5.1	3.7	2.5	3.9	3.0	4.3	4.4	5.6	4.1	3.5	6.4	7.4
Kazakhstan	4	3.6	5.3	4.5	4.3	3.5	4.3	3.1	4.8	6.0	4.1	5.9	5.0
Korea, Republic of	5	3.9	5.8	4.6	5.0	2.8	4.0	3.6	4.0	7.3	3.3	7.0	4.9
Lebanon	4	5.2	3.3	4.1	4.2	4.3	4.9	4.2	5.6	4.4	4.2	4.4	6.3
Malaysia	4	5.8	5.2	5.2	5.6	4.1	5.2	4.9	5.6	6.1	4.7	7.2	5.8
Philippines	2	5.1	3.9	2.9	3.6	5.0	6.3	4.1	5.2	6.1	4.1	5.5	5.7
Taiwan	5	4.7	4.4	4.5	4.1	2.9	4.2	4.1	4.4	5.8	4.2	7.3	4.8
Thailand	3	4.2	4.0	4.0	3.7	3.6	4.3	3.9	4.8	6.4	4.1	6.4	5.5
Vietnam	1	3.5	4.3	4.6	3.5	2.5	4.2	3.9	4.7	6.1	4.2	6.9	5.4
Asia & Oceania		**4.5**	**4.6**	**4.0**	**4.1**	**3.4**	**4.7**	**4.1**	**4.7**	**5.9**	**4.1**	**6.3**	**5.3**
Argentina	4	3.1	3.0	1.9	3.7	3.0	4.8	3.7	4.7	5.6	3.8	5.8	4.9
Barbados	4	3.1	3.7	2.5	3.5	2.6	4.5	2.9	4.8	4.4	3.6	6.1	4.3
Brazil	4	3.9	3.7	2.2	3.4	2.1	3.8	2.9	4.2	5.0	3.5	4.7	3.9
Chile	4	3.5	4.6	5.4	5.4	2.4	4.9	3.5	4.7	3.4	3.8	7.5	5.1
Colombia	3	3.2	3.8	3.4	4.3	2.9	5.3	3.5	4.1	4.1	4.2	6.2	5.2
Ecuador	3	3.4	4.7	3.2	4.4	3.7	6.2	3.7	4.9	3.7	4.2	7.6	5.8
Guatemala	3	2.8	2.6	3.2	3.3	2.1	4.6	2.8	4.2	3.2	3.3	6.1	4.3
Mexico	4	4.0	4.8	3.7	5.1	2.6	5.4	4.1	4.7	5.4	3.6	6.3	5.0
Panama	4	3.3	2.7	5.5	3.7	1.9	3.7	3.2	4.4	4.2	4.4	7.1	5.2
Peru	3	3.0	3.1	3.0	3.7	3.0	5.0	3.0	3.7	3.8	3.8	5.6	5.0
Puerto Rico	5	3.3	4.1	2.2	3.3	2.0	4.2	2.9	4.6	4.3	3.7	5.5	3.8
Uruguay	4	3.7	3.4	3.7	5.1	2.0	4.6	4.2	5.1	3.2	4.1	6.2	3.6
Latin America & Caribbean		**3.4**	**3.7**	**3.3**	**4.1**	**2.5**	**4.8**	**3.4**	**4.5**	**4.2**	**3.8**	**6.2**	**4.7**
Belgium	5	5.3	6.5	3.2	4.8	3.1	5.4	4.6	6.2	4.8	5.1	6.4	4.1
Bulgaria	3	4.4	2.9	4.8	3.4	2.6	4.2	3.6	5.2	3.6	3.9	6.8	3.5
Croatia	4	3.3	2.8	2.0	3.2	1.9	3.5	2.9	4.3	6.1	3.0	6.5	2.6

Economy	Stage	1	2a	2b	3	4a	4b	5	6	7a	7b	8	9
Estonia	5	4.9	3.8	4.9	4.9	4.2	4.8	4.5	5.2	5.2	5.1	7.5	5.7
Finland	5	4.3	5.4	4.9	4.6	3.9	4.2	3.9	5.7	5.4	4.6	7.6	4.5
Germany	5	4.3	4.3	3.9	5.6	2.7	4.1	4.0	5.9	4.5	5.2	6.4	4.2
Greece	5	3.0	2.9	2.3	2.8	2.7	4.6	3.8	4.5	5.0	3.1	6.1	3.6
Hungary	4	4.0	2.7	2.4	3.2	2.3	4.3	3.6	4.4	5.5	3.8	6.1	3.2
Ireland	5	5.4	4.9	4.8	5.9	3.6	4.9	4.6	6.1	3.9	5.2	6.8	5.4
Italy	5	4.0	3.1	2.4	3.3	3.0	4.3	3.9	4.3	4.3	4.2	5.1	3.5
Japan	5	4.2	5.0	3.7	4.1	2.3	4.2	4.5	3.5	6.5	4.3	6.9	3.8
Latvia	4	4.5	3.7	3.8	4.7	4.0	5.4	3.5	6.1	4.8	4.5	6.7	4.8
Luxembourg	5	4.1	5.3	5.6	6.0	3.5	5.4	5.4	6.0	3.8	5.5	6.8	4.1
Macedonia	3	4.0	4.0	4.6	4.4	3.6	4.9	4.1	5.1	5.7	3.7	6.5	4.1
Netherlands	5	5.7	5.4	5.8	5.8	4.9	5.6	5.1	5.9	5.0	6.0	7.4	5.7
Norway	5	4.2	3.7	4.3	4.4	4.1	4.1	4.2	5.5	5.2	4.2	6.8	4.7
Poland	4	4.7	4.6	3.4	4.6	2.5	3.9	3.5	4.5	6.4	4.6	6.8	4.4
Portugal	5	4.7	5.0	5.8	4.7	5.6	4.7	5.3	4.6	5.4	5.0	3.5	5.2
Romania	3	3.4	3.6	3.5	3.8	3.9	4.5	3.7	6.0	4.2	4.0	4.9	4.1
Slovakia	4	4.3	3.7	3.4	3.7	3.4	4.2	3.2	5.5	4.1	4.2	7.0	3.5
Slovenia	5	4.2	4.0	3.1	4.5	2.8	3.9	3.8	4.7	5.3	3.8	6.4	3.4
Spain	5	4.0	4.0	3.8	4.8	3.5	4.2	3.9	4.4	4.4	4.3	5.1	4.4
Sweden	5	4.7	4.0	3.9	4.6	3.8	3.9	4.0	5.1	5.7	4.5	7.5	5.0
Switzerland	5	5.3	5.7	5.8	5.9	4.9	6.2	6.2	6.3	4.5	5.7	7.9	5.8
Turkey	4	3.8	4.4	3.4	4.1	2.2	5.2	4.2	5.1	5.6	3.9	6.5	5.3
United Kingdom	5	5.4	4.6	4.4	4.5	4.0	5.0	4.2	5.0	5.0	4.7	5.9	5.3
Europe		**4.4**	**4.2**	**4.0**	**4.5**	**3.5**	**4.6**	**4.1**	**5.3**	**4.9**	**4.5**	**6.4**	**4.4**
Canada	5	5.2	4.7	5.2	5.0	4.1	5.3	4.3	6.3	3.8	4.9	7.0	5.9
USA	5	5.4	4.4	4.6	4.1	3.5	4.4	4.2	5.4	5.6	4.4	7.1	6.8
North America		**5.3**	**4.5**	**4.9**	**4.5**	**3.8**	**4.8**	**4.2**	**5.9**	**4.7**	**4.6**	**7.0**	**6.4**
GEM		**4.2**	**4.2**	**3.9**	**4.3**	**3.1**	**4.5**	**3.8**	**4.9**	**5.1**	**4.1**	**6.3**	**4.7**

1 Entrepreneurial finance, 2a Government policies: support and relevance, 2b Government policies: taxes and bureaucracy, 3 Government entrepreneurship programs, 4a Entrepreneurial education at school stage, 4b Entrepreneurial education at post school stage, 5 R&D Transfer, 6 Commercial and legal infrastructure, 7a Internal market dynamics, 7b Internal market burdens or entry regulation, 8 Physical infrastructures, 9 Cultural and social norms.

Development stages: 1 = factor driven, 2 = transition to efficiency driven, 3 = efficiency driven, 4 = transition to innovation driven, 5 = innovation driven.

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The GEM India Report 2015-16 is an outcome of collective efforts of GEM India consortium that strives to capture and understand the current state of affairs in Indian entrepreneurship. This report provides information on entrepreneurship ecosystem prevailing in the country and entrepreneurial activities being carried out in various states. This report is the third national level report by the GEM India Team.

The GEM India study, conducted using a well-established GEM research methodology that is consistent across all participating countries, generates a variety of relevant primary information on different aspects of entrepreneurship and provides harmonised measures about individuals' attributes and their activities in different phases of entrepreneurship. The key outcomes of research reported in the book are relevant to researchers, policymakers, entrepreneurs and corporate houses.

KEY HIGHLIGHT

- In-depth coverage of entrepreneurial activity in India
- Insightful analyses of data on different parameters of entrepreneurship
- Graphic and easy-to-interpret presentation of findings
- Recommendation for policy implications

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